



SERVICE MANUAL

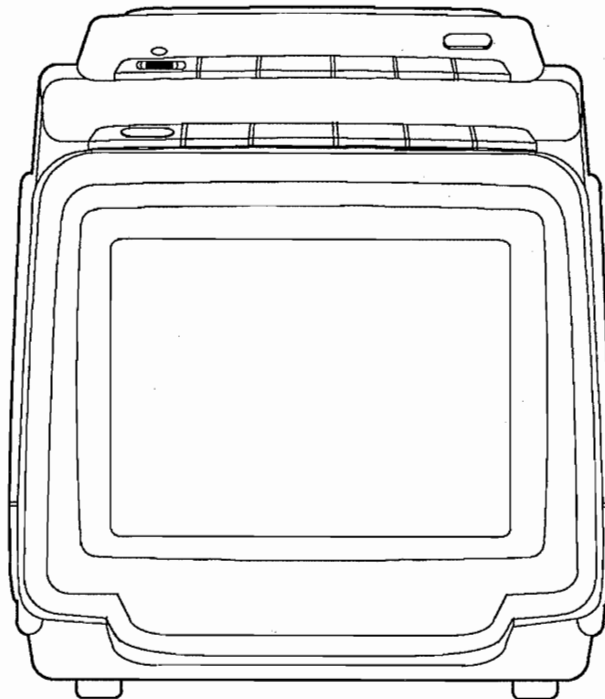
Sec. 1: Main Section

Specifications
Adjustment Procedures
Schematic Diagrams
Printed Circuit Boards
Cabinet Exploded View
Cabinet & Electrical Parts List

Sec. 2 : Deck Mechanism Section

Standard Maintenance
Alignment for Mechanism
Disassembly/Assembly of Mechanism
Deck Printed Circuit Boards
Deck Exploded Views
Deck Parts List

5-Inch Color TV/VCR FC5TRC1



PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by a  in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

MAIN SECTION

FC5TRC1

5-Inch Color TV/VCR

Sec. 1: Main Section

Specifications

Adjustment Procedures

Schematic Diagrams

Printed Circuit Boards

Cabinet Exploded View

Cabinet & Electrical Parts List

CONTENTS

General Specifications	1-2	TV Section	1-67
Performance Specifications	1-3	VCR Section	1-68
Important Safety Precautions	1-5	Wiring Diagrams	1-69
Standard Notes for Servicing	1-9	TV Section	1-69
Preparation for Servicing	1-13	VCR Section	1-70
Cabinet Disassembly Instructions	1-14	System Control Timing Chart	1-71
VCR Cabinet Disassembly Instructions	1-21	Electrical Parts List	1-73
VCR Cabinet Exploded View	1-22	TV Section	1-73
VCR Cabinet Parts List	1-22	VCR Section	1-87
Block Diagrams	1-23	Cabinet Exploded View	1-115
Electrical Adjustments	1-27	Cabinet Parts List	1-116
Schematic Diagrams/CBAs and Test Points ..	1-50	IC Lead Identification	1-118
Waveforms	1-67	IC Pin Function Description	1-119

GENERAL SPECIFICATIONS

- A) System
- 1) CRT: 5". Flat Square
 - 2) Color: NTSC-M
 - 3) Receiving Channel: [VHF-L]....2~6ch,
[VHF-H]....7~13ch
[UHF]....14~69ch
-181 Channels- [CATV] [VHF].....5A
[MID band]....A5~A1, A~I
[SUPER Band]..J~W
[HYPER Band]
....W+1~W+84
 - 4) Tuning System: PLL Synthesizer System
Automatic Channel Pre-sets
 - 5) Controls (Items Marked with "*" are located in the front compartment)
 - Power: Push Switch
 - Stop/Eject: Push Switch
 - Volume: 2-Push Switches
(up/down)
 - Channel: 2-Push Switches
(up/down)
 - *F.F: Push Switch
 - *Rew.: Push Switch
 - *Play: Push Switch
 - Display: Push Switch
 - Select(Picture): Push Switch
 - Up/Down(Picture): Push Switch
 - Monitor Off: Push Switch
 - Input Select: Push Switch
 - Preset(Channel): Push Switch
 - Select(Channel): Push Switch
 - Recording: Slide Switch
 - Still/Pause: Push Switch
 - Memory(Counter): Push Switch
 - Reset(Counter): Push Switch
 - 6) External Connections
 - Antenna: UHF / VHF 75ohm, Unbalanced
 - Video/Audio In, Out: 4-RCA Jacks
- Earphone Jack: ø3.5mm JACK (switched)
- 7) Speaker: 77 m/m Round Type
 - 8) Audio Output Power: 700mW, 10% THD
 - 9) DC Power Supply: DC Input Jack (center +)
- B) VCR Section
- 1) Playback System: Twin Head Helical Scanning
 - 2) Loading System: Top Loading
 - 3) Video Signal: NTSC 525 Lines, 60Hz
 - 4) Tape Format: 8m/m Video
 - 5) Play Time SP: 2 hours (120 minutes tape)
 - 6) Tape Speed : 1.43 cm/sec (approx.)
- C) Indicators
- OSD: Channel Tape Counter
Volume Play
Brightness Stop
Color Rec
Contrast FF(/CUE)
Tint REW(/REV)
TV/AUX In Pause
Still
- D) Mechanical
- 1) Dimensions: 13" 1/2 x 6" 1/2 x 7"
(H x W x D)
342 x 170 x 187mm
(H x W x D)
 - 2) Cabinet: All Plastic Cabinet
 - 3) Weight: 8.8lbs. 4.0kg
- E) Power Supply
- 1) Power Requirement: AC 120V/60Hz or DC 12V (12V~16V)
 - 2) Power Consumption: 31W/AC
- F) Accessories
- 1) AC Adapter
 - 2) Car Battery Cord

PERFORMANCE SPECIFICATIONS

Test input terminals
 Video 87.5kHz dev.
 Audio 25kHz dev. (1kHz)
 Video input (1Vp-p)
 Audio input (-10dBV)
 Ant. input (80dBuV)

TV Section

Tuner

Description	Condition	Unit	Nominal	Limit
1. Intermediate Frequency.	Picture	MHz	45.75	—
	Sound	—	41.25	—
2. Peak Picture Sensitivity.	VHF	dBuV	20	30
	CATV	dBuF	20	30
	UHF	dBuF	20	40
	10mv input	MHz	±2.0	±1.8
3. AFT Pull-in Range				

Deflection

Description	Condition	Unit	Nominal	Limit
1. Deflection Frequency	Horizontal	kHz	15.734	—
	Vertical	Hz	60	—
	Vertical	Hz	60	—
2. Linearity	Horizontal	%	10	12
	Vertical	%	7	10
	Vertical	—	—	10
3. High Voltage	—	kV	12	—
4. Over Scan	—	%	10	—

Video & Chroma

Description	Condition	Unit	Nominal	Limit
1. Brightness	APL100%	Ft-L	50	40
2. Color Temperature		K	8500-20MPCD	—
3. Resolution, Horizontal	Line	230	—	
	Vertical	300	—	
4. Color Burst Level	—	mV	280	200

Audio

All items are measured across 8-ohm resistor load at speaker output terminal, using L.P.F.

Description	Condition	Unit	Nominal	Limit
1. Audio Maximum Output	10% THD	mW	600	500
2. Audio Distortion	50mV	%	4	7
3. Audio Frequency Response	-6dB	Hz	200-7K	—

Video Servo Section

Description	Condition	Unit	Nominal	Limit
1. Horizontal Resolution	(PB)	line	220	200
2. Jitter at Low	(PB)	uSEC.	0.1	0.15
	(R/P)	uSEC.	0.05	0.1

Audio Section

All items are measured at LINE output terminal.

Description	Condition	Unit	Nominal	Limit
1. Audio Output Level	(PB)	dBV	-10	±3dB
	(R/P)			
2. Audio Distortion	(PB)	%	1.5	
	(R/P)		0.5	
3. Audio Frequency. Response	100Hz	dB	-0.5	-0.8
Ref.1kHz	7kHz		-2.0	-3.0

Note: Nominal specifications represent the design specifications. All units should be able to approximate these—some will exceed and some may drop slightly below these specifications. Limit specifications represent the absolute worst condition that still might be considered acceptable; in no case should a unit fail to meet limit specifications.

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, our products are strictly inspected for recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Safety Precautions for TV Circuit

1. Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items:

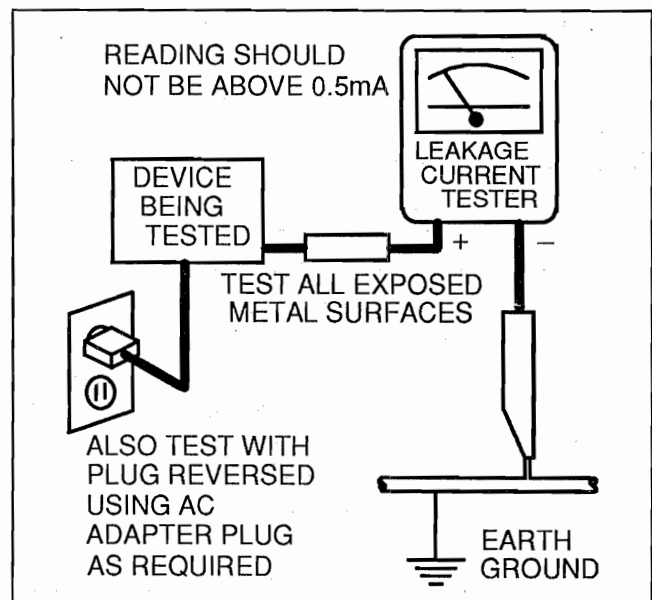
a. Be sure that no built-in protective devices are defective and have been defeated during servicing. (1) Protective shields are provided on this chassis to protect both the technician and the customer. Correctly replace all missing protective shields, removed for servicing convenience. (2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put all protective devices back in place, including, but not limited to, nonmetallic control knobs, insulating fishpapers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. **Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning. Servicers who defeat safety features or fail to perform safety checks may be liable for any resulting damage.**

b. Be sure that there are no cabinet openings through which an adult or child might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, (1) spacing between the picture tube and the cabinet mask, (2) excessively wide cabinet ventilation slots, and (3) an improperly fitted and/or incorrectly secured cabinet back cover.

c. Antenna Cold Check - With the AC plug removed from any AC source, connect an electrical jumper across the two AC plug prongs. Place the instrument AC switch in the on position. Connect one lead of an ohmmeter to the AC plug prongs tied together and touch the other ohmmeter lead in turn to each tuner antenna input exposed terminal screw and, if applicable, to the coaxial connector. If the measured resistance is less than 1.0 megohms or greater than 5.2 megohms, an abnor-

malicity exists that must be corrected before the instrument is returned to the customer. Repeat this test with the power switch in the off position.

d. Leakage Current Hot Check - With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a measuring system that complies with American National Standards Institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1410, (50.7). With the power switch first in the on position and then in the off position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinet, screw heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milli-ampere. Reverse the power cord plug in the outlet and repeat the test.



ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE INSTRUMENT TO THE CUSTOMER OR BEFORE

CONNECTING THE ANTENNA OR ACCESSORIES.

e. X-Ray Radiation and High Voltage Limits -

Because the picture tube is the primary potential source of X-ray radiation in solid-state TV receivers, it is specially constructed to prohibit X-ray radiation emissions. For continued X-ray radiation protection, the replacement picture tube must be the same type as the original. Also, because the picture tube shields and mounting hardware do an X-ray radiation protection function, they must be correctly in place. High voltage must be measured each time servicing is done that involves B+, horizontal deflection, or high voltage. Correct operation of the X-ray radiation protection circuits also must be reconfirmed each time they are serviced. (X-ray radiation protection circuits also may be called "horizontal disable" or "hold down.") Read and apply the high voltage limits and, if the chassis is so equipped, the X-ray radiation protection circuit specifications given on instrument labels and in the Product Safety and X-ray radiation Warning note on the service data chassis schematic. High voltage is maintained within specified limits by close tolerance safety-related components/adjustments in the high-voltage circuit. If high voltage exceeds specified limits, check each component specified on the chassis schematic and take corrective action.

2. Read and comply with all caution and safety-related notes on or inside the receiver cabinet, on the receiver chassis, or on the picture tube.

3. **Design Alteration Warning** - Do not alter or add to the mechanical or electrical design of this TV receiver. Design alterations and additions, including, but not limited to, circuit modifications and the addition of items such as auxiliary audio and/or video output connections, might alter the safety characteristics of this receiver and create a hazard to the user. Any design alterations or additions will void the manufacturer's warranty and may make you, the servicer, responsible for personal injury or property damage resulting therefrom.

4. Picture Tube Implosion Protection Warning -

The picture tube in this receiver employs integral implosion protection. For continued implosion protection, replace the picture tube only with one of the same type number. Do not remove, install, or handle the picture tube in any manner without first putting on shatterproof goggles equipped with side shields.

People not so equipped must be kept safely away while picture tubes are handled. Keep the picture tube away from your body. Do not handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; because of potential hazard, do not try to remove such "permanently attached" yokes from the picture tube.

5. Hot Chassis Warning -

- a. Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord and may be safety-serviced without an isolation transformer only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC power source. To confirm that the AC power plug is inserted correctly, with an AC voltmeter, measure between the chassis and a known earth ground. If a voltage reading in excess of 1.0V is obtained, remove and reinsert the AC power plug in the opposite polarity and again measure the voltage potential between the chassis and a known earth ground.
- b. Some TV receiver chassis normally have 85V AC(RS) between chassis and earth ground regardless of the AC plug polarity. This chassis can be safety-serviced only with an isolation transformer inserted in the power line between the receiver and the AC power source, for both personnel and test equipment protection.
- c. Some TV receiver chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulation material that must not be defeated or altered.

6. Observe original lead dress. Take extra care to assure correct lead dress in the following areas:

- a. near sharp edges
- b. near thermally hot parts-be sure that leads and components do not touch thermally hot parts
- c. the AC supply
- d. high voltage
- e. antenna wiring

Always inspect in all areas for pinched, out of place, or frayed wiring. Check the AC power cord for damage.

7. Components, parts, and/or wiring that appear to have overheated or are otherwise damaged should be replaced with components, parts, or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential

safety hazard.

- 8. Product Safety Notice** - Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by a () on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replace-

ment part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are strictly inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

- A.** Parts identified by the () symbol are critical for safety.
Replace only with part number specified.
- B.** In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.
Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.
- C.** Use specified internal wiring. Note especially:
- 1) Wires covered with PVC tubing
 - 2) Double insulated wires
 - 3) High voltage leads
- D.** Use specified insulating materials for hazardous live parts. Note especially:
- 1) Insulation tape
 - 2) PVC tubing
 - 3) Spacers
 - 4) Insulators for transistors
- E.** When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.
- F.** Observe that the wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
- G.** Check that replaced wires do not contact sharp edges or pointed parts.
- H.** When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.
- I.** Also check areas surrounding repaired locations.
- J.** Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.
- K.** Crimp type wire connector
The power transformer uses crimp type connectors which connect the power cord and the primary side of the transformer. When replacing the transformer, follow these steps carefully and precisely to prevent shock hazards.
Replacement procedure
- 1) Remove the old connector by cutting the wires at a point close to the connector.
- Important:** Do not re-use a connector. (Discard it.)
- 2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.
 - 3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.
 - 4) Use the crimping tool to crimp the metal sleeve at its center. Be sure to crimp fully to the complete closure of the tool.
- L.** When connecting or disconnecting the VCR connectors, first, disconnect the AC plug from the AC outlet.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts, and wires have been returned to their original positions. Afterwards, do the following tests and confirm the specified values do verify compliance with safety standards.

1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

Table 1 : Ratings for selected area

AC Line Voltage	Region	Clearance Distance (d) (d')
110 to 130 V	USA or CANADA	≥ 3.2 mm (0.126 inches)

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

2. Leakage Current Test

Confirm the leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is low or equal to specified value in table and below.

Measuring Method (Power ON) :

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across the terminals of load Z. See Fig. 2 and the following table.

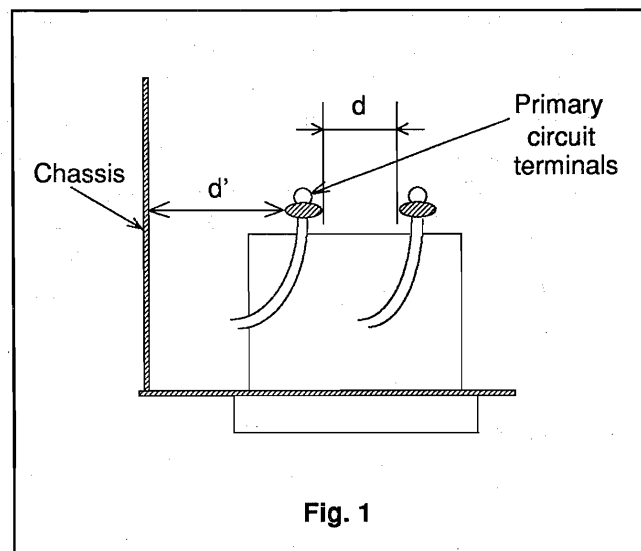


Fig. 1

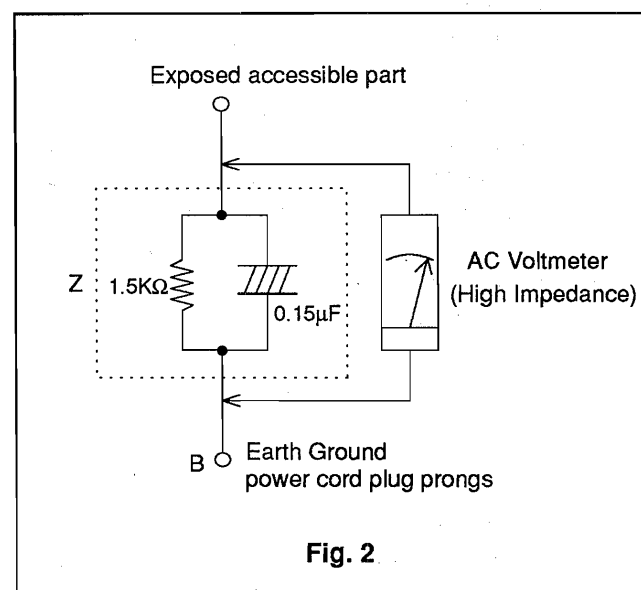


Fig. 2

Table 2 : Leakage current ratings for selected areas

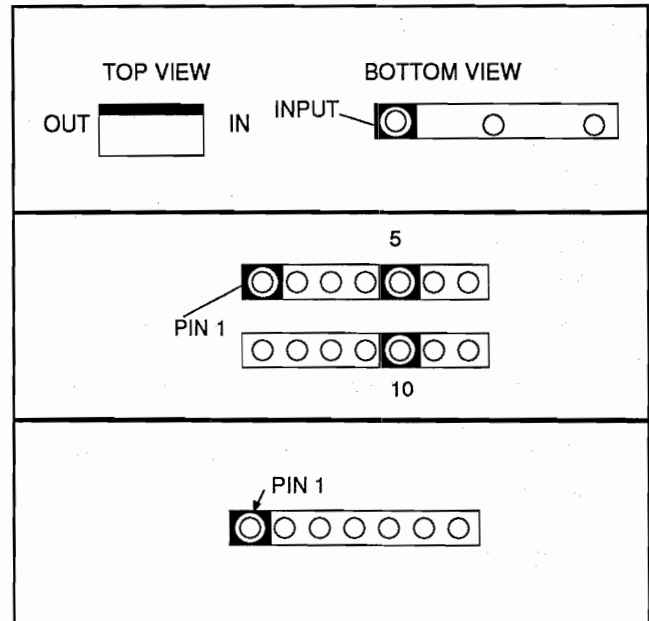
AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
110 to 130 V	USA or CANADA	0.15μF CAP. & 1.5kΩ RES. connected in parallel	≤ 0.5 mA rms	Exposed accessible parts

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

STANDARD NOTES FOR SERVICING

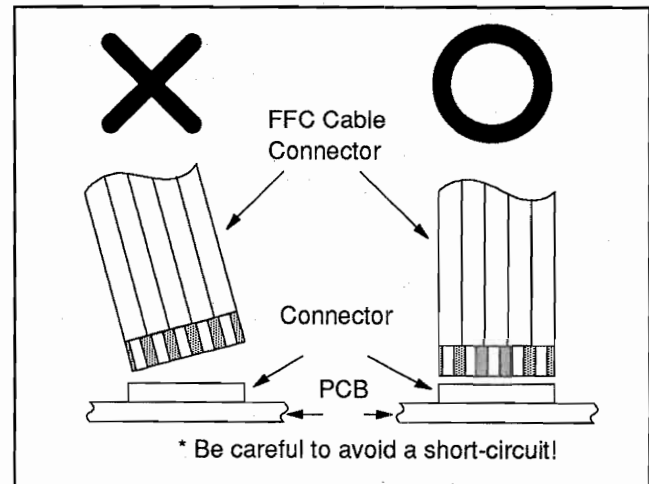
Circuit Board Indications

- The output pin of the 3 pin Regulator ICs is indicated as shown:
- For other ICs, pin 1 and every fifth pin are indicated as shown:
- The 1st pin of every pin connector is indicated as shown:



Instructions for Connectors

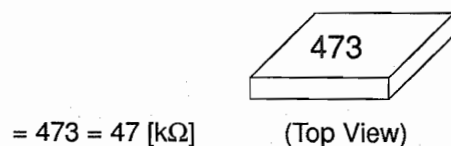
- When you connect or disconnect the FFC cable (connector), be sure to disconnect the AC cord.
- FFC cable (connector) should be inserted parallel into the connector, not at an angle.



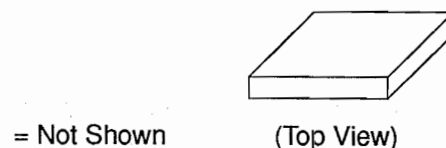
How to read the values of the rectangular type chip components

EXAMPLE:

(a) Resistor



(b) Capacitor



CAUTION:

Once chip parts (Resistors, Capacitors, Transistors, etc.) are removed, they must not be reused. Always use a new part.

Replacement Procedures for Leadless (Chip) Components

The following procedures are recommended for the replacement of the leadless components used in this unit.

1. Preparation for replacement

a. Soldering iron

Use a pencil-type soldering iron (less than 30 watts).

b. Solder

Eutectic solder (Tin 63%, Lead 37%) is recommended.

c. Soldering time

Do not apply heat for more than 4 seconds.

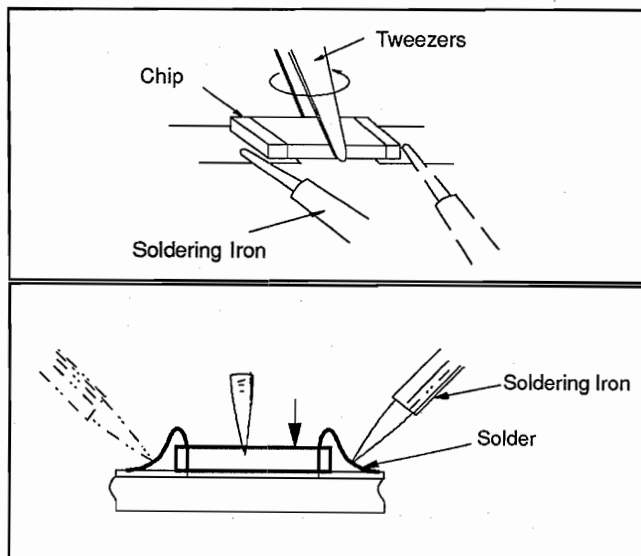
d. Preheating

Leadless capacitors must be preheated before installation.

(266°F-302°F, 130°C-150°C, for about two minutes.)

Note:

- Leadless components must not be reused after removal.
- Excessive mechanical stress and rubbing of the component electrode must be avoided.



2. Removing the leadless component

Grasp the leadless component body with tweezers and alternately apply heat to both electrodes. When the solder on both electrodes has melted, remove the leadless component with a twisting motion.

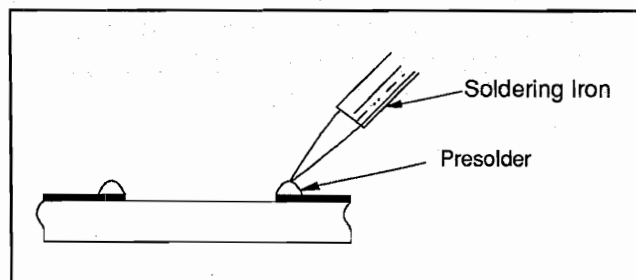
Note:

- Do not attempt to lift the component off the board until the component is completely disconnected from the board by the twisting action.
- Be careful not to break the copper foil on the printed circuit board.

3. Installing the leadless component

- Presolder the contact points of the circuit board.
- Press the part downward with tweezers and solder both electrodes as shown below.

Note: Do not glue the replacement leadless component to the circuit board.



How to Remove/Install Flat Pack IC

1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

- Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the flat pack-IC (about 5 to 6 seconds). (Fig. S-1-1)
- Remove the flat pack-IC with tweezers while applying the hot air.

Caution:

- Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage

to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)

- The flat pack-IC on the PCB is affixed with glue, so be careful not to break or damage the foil of each pin or the solder-lands under the IC when removing it.

With Soldering Iron:

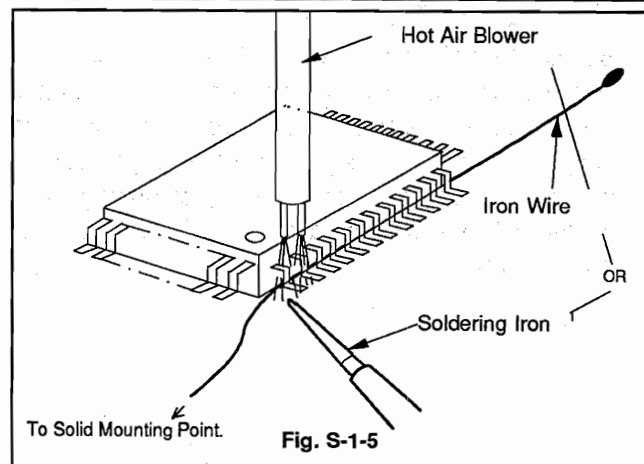
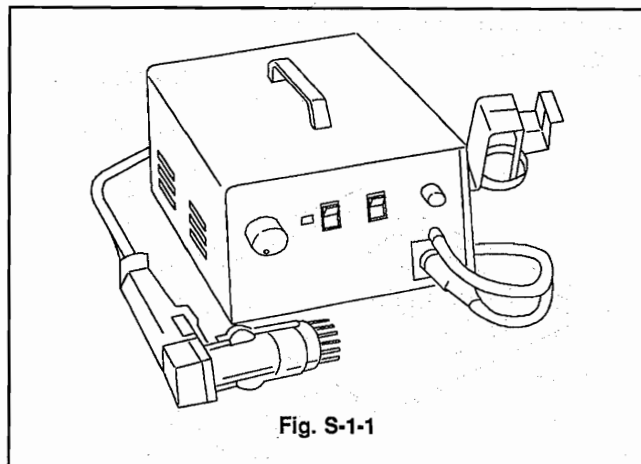
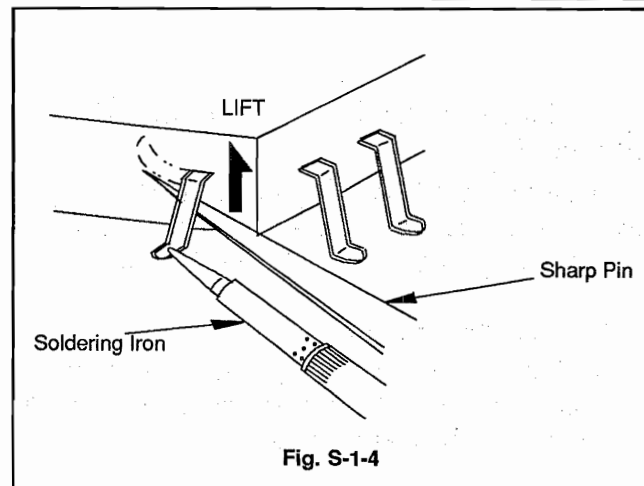
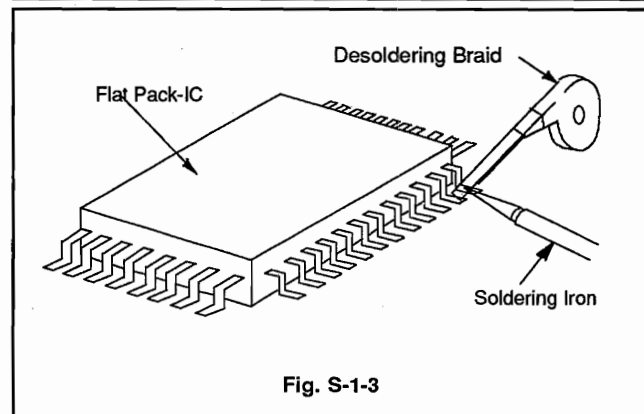
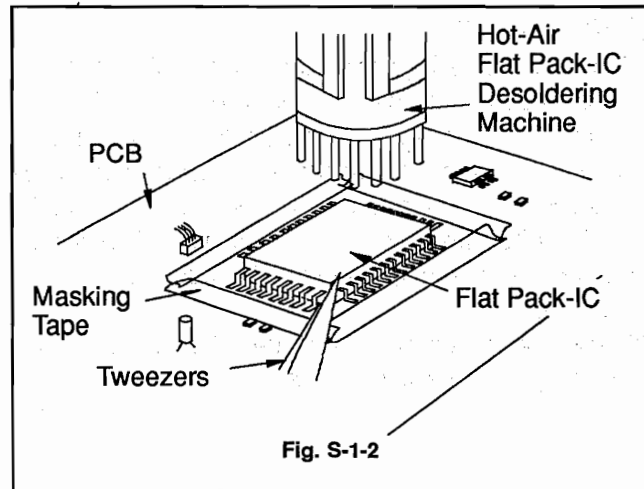
- (1) Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
- (2) Lift each lead of the flat pack-IC upward one by one using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

With Iron Wire:

- (1) Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)
- (2) Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.
- (3) While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the PCB contact pads as shown in Fig. S-1-5.

Note:

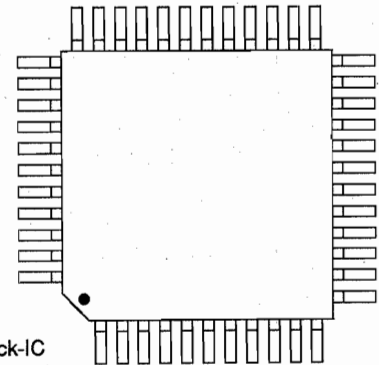
When using a soldering iron, care must be taken to ensure that the Flat Pack-IC is not being held by glue. When the Flat Pack-IC is removed from the PCB, handle it gently because it may be damaged if force is applied.



2. Installation

- (1) Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the PCB so you can install a replacement flat pack-IC more easily.
- (2) The "●" mark on the flat pack-IC indicates pin 1. (See Fig. S-1-6) Be sure this mark matches the 1 on the PCB when positioning for installation. Then pre-solder the four corners of the flat pack-IC (See Fig. S-1-7).
- (3) Solder all pins of the flat pack-IC. Be sure that none of the pins has solder bridges.

Example:



Pin 1 of the Flat Pack-IC is indicated by a "●" mark.

Fig. S-1-6

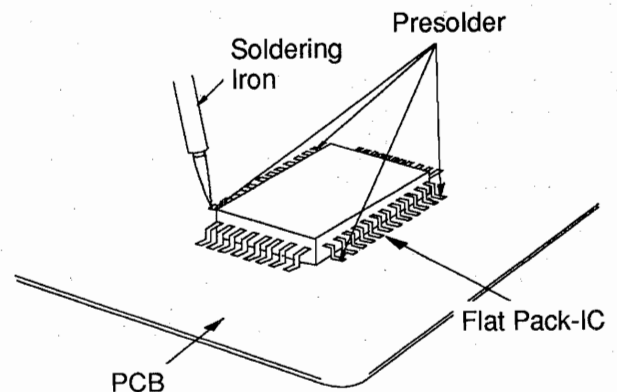


Fig. S-1-7

Instructions for Handling Semiconductors

Electrostatic breakdown of the semiconductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

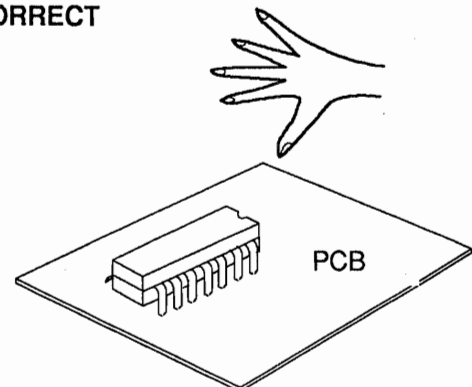
1. Ground for Human Body

Be sure to wear a grounding band (1M ohm) that is properly grounded to remove any static electricity that may be charged on the body.

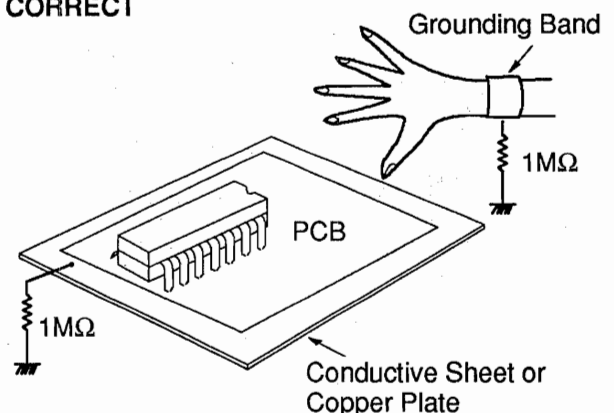
2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding (1M ohm) on the workbench or other surface, where the semiconductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semiconductors to your clothing.

INCORRECT



CORRECT

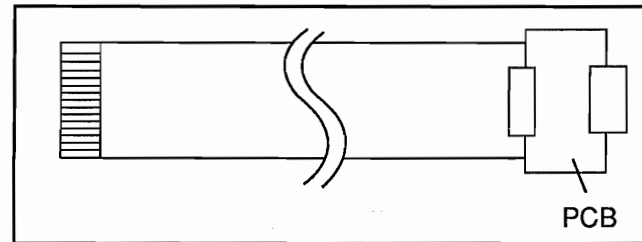


PREPARATION FOR SERVICING

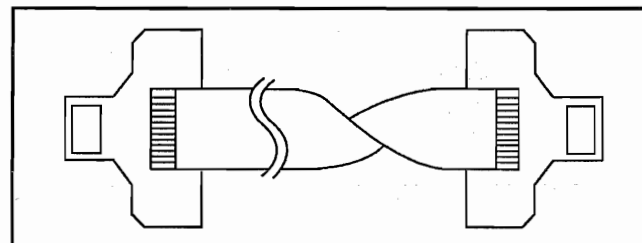
Service Connectors

a) Extension Cables

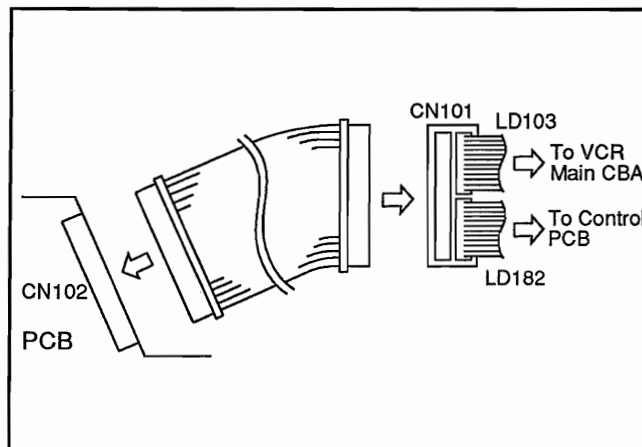
Fig. No.	Connection	Unit	Unit	Part No.
Cable [1]	VCR Servo/System Control CBA CN-17	VCR Driver CBA CL-17		2581JNTBCN17
Cable [2]	VCR Servo/System Control CBA CN-16	VCR Driver CBA CL-16		2581JNTBCN16
Cable [3]	VCR Servo/System Control CBA CN-6 VCR Servo/System Control CBA CN-7	VCR Main CBA CL-6 VCR Main CBA CL-7		2581JNTBCN06
Cable [4]	VCR Servo/System Control CBA CN-9	VCR Main CBA CL-9		2581JNTBCN09
Cable [5]	VCR Servo/System Control CBA CN-8	VCR Main CBA CL-8		2581JNTBCN08
Cable [6]	DC-DC CBA CN102	Connector CBA CN101		B3000TVCN102
Cable [7]	DC-DC CBA CN702	VCR Main CBA CN-5		B3000TVCN702



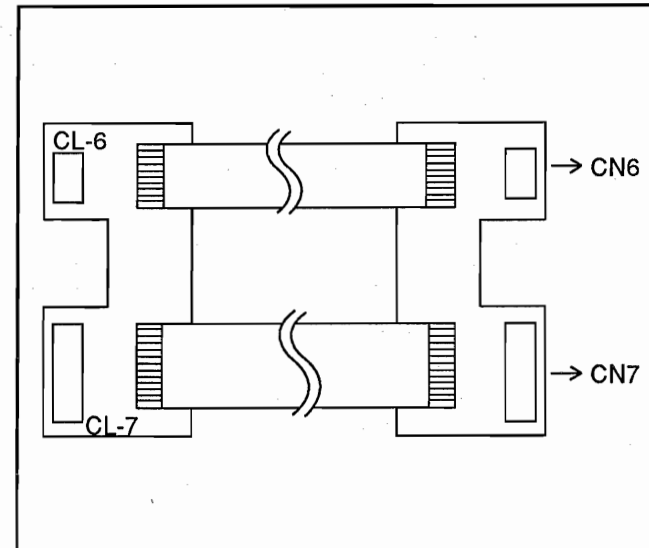
Cable [1] and [2]



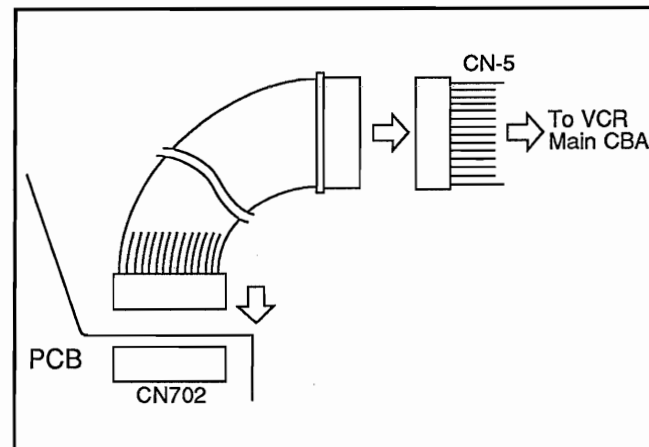
Cable [4] and [5]



Cable [6]



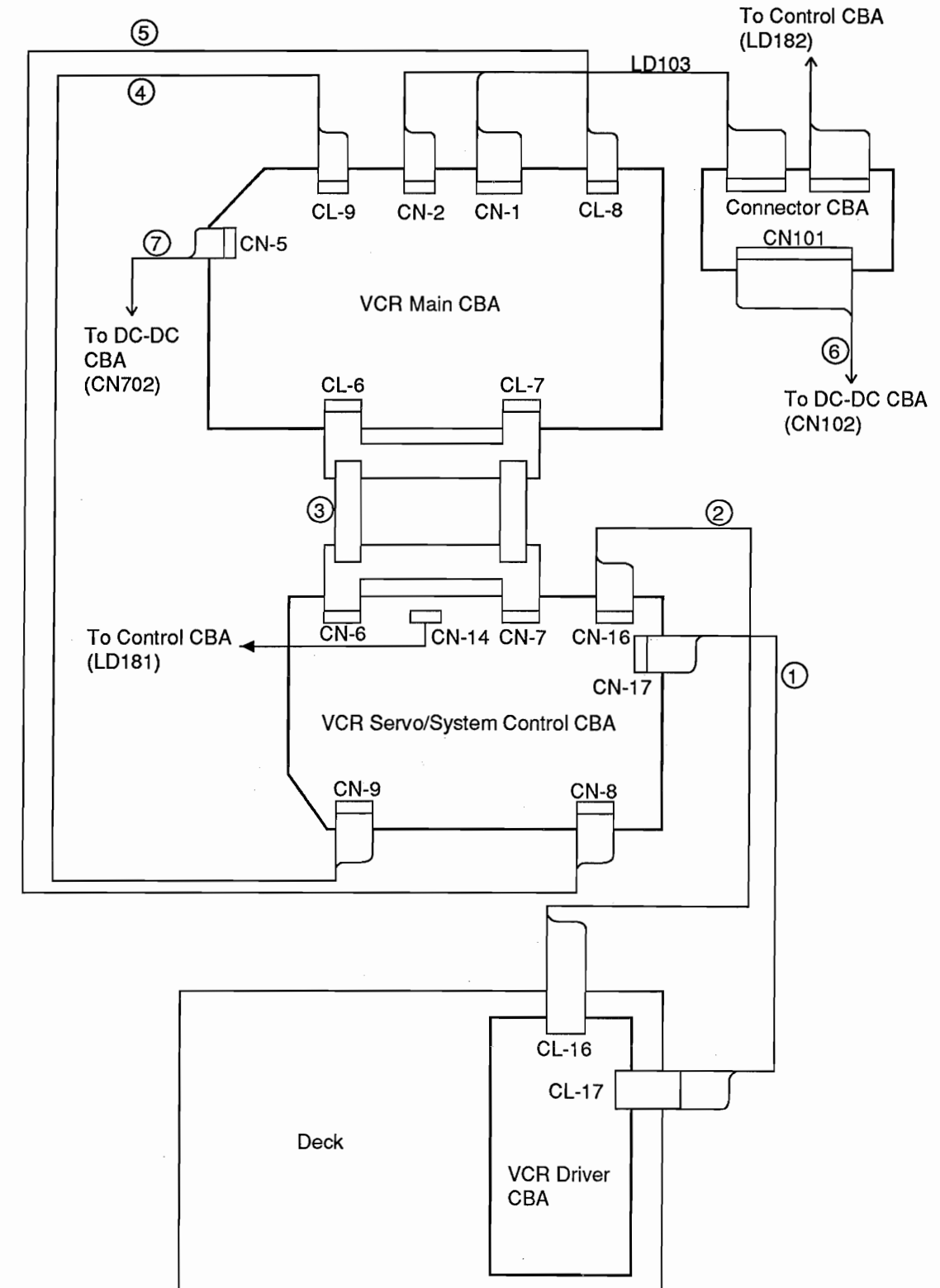
Cable [3]



Cable [7]

Service Connector Connection Method

Make the connections shown below before service work on the VCR Main CBA, the VCR Servo/System Control CBA, and the VCR Driver CBA.



Wire No. ① ② ③ ④ ⑤ : FFC Cable Assembly

NOTES

CABINET DISASSEMBLY INSTRUCTIONS

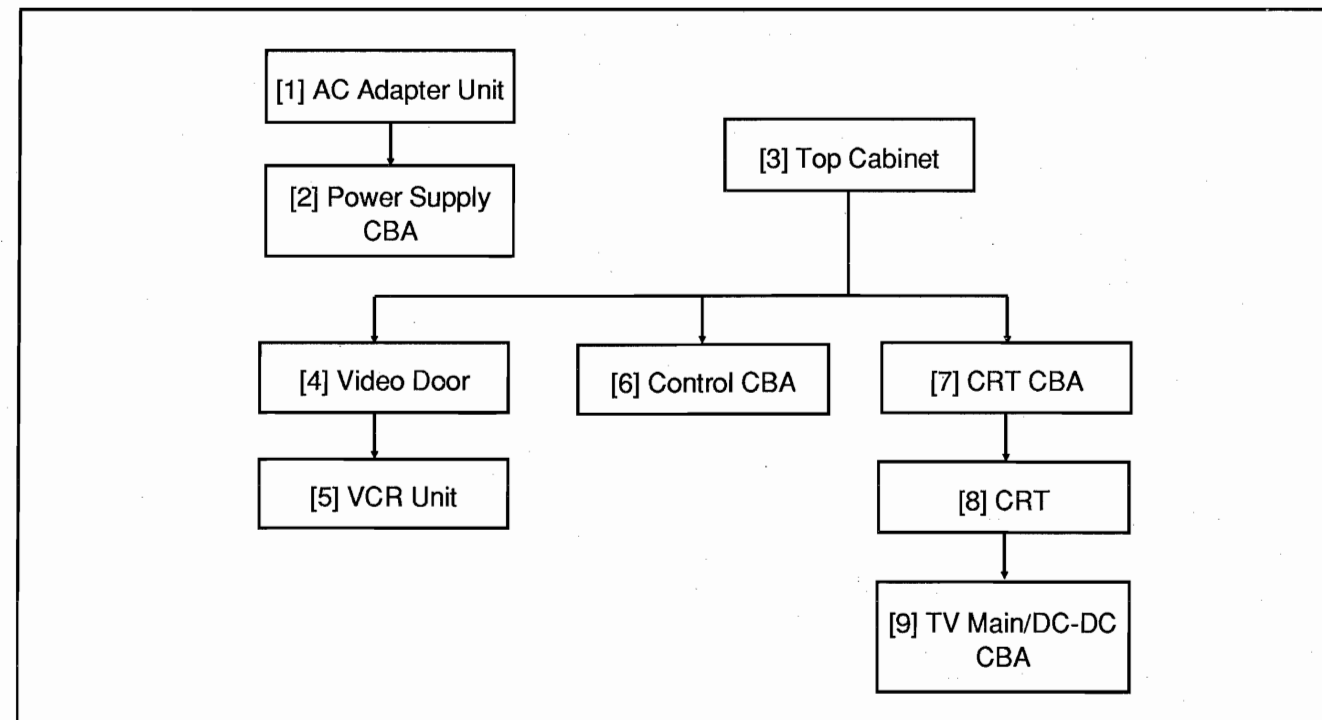
General Note: "CBA" is an abbreviation for "Circuit Board Assembly."

1. Disassembly Flowchart

This flowchart indicates the disassembly steps for the cabinet parts, the VCR Unit, and the PC Boards in order to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.

Caution!

When removing the CRT, be sure to discharge the Anode Lead by connecting the CRT Ground Wire through a 10-megohm resistor before removing the Anode Cap.



2. Disassembly Method

STEP /LOC. No.	PART	REMOVAL		
		Fig.No.	REMOVE/UNLOCK/UNHOOK/RELEASE/UNPLUG/ UNCLAMP/DESOLDER	Ref. Note
[1]	AC Adapter Unit	CAB1	DC Cable	1
[2]	Power Supply CBA	CAB2	2(S-1), 4(L-1), 4(L-2)	2
[3]	Top Cabinet	CAB3	3(S-3a), (S-3b), 2(S-4), (CN101), (LD101)	3
[4]	Video Door	CAB4	2(S-2), 2(HK-1)	4
[5]	VCR Unit	CAB4, CAB6	3(S-5), (CN01), (CN02), (CN14)	5
[6]	Control CBA	CAB4, CAB6	Control Door, 2(S-6a), 2(S-6b), (CN801), (LD181), (LD182), (LD183), (LD184)	6
[7]	CRT CBA	CAB5, CAB6	(LD451), (LD452), (CN453) (Focus Wire), (Screen Wire)	7
[8]	CRT	CAB5, CAB6	4(S-7), (CN501), (Anode Cap)	8
[9]	TV Main/DC-DC CBA	CAB5	ANT Cable, 6(L-4)	9
↓	↓	↓	↓	↓
①	②	③	④	⑤

①:Order of steps in Procedure

When reassembling, follow the steps in reverse order.

These numbers are also used as the identification (location) No. of parts in Figures.

②:Part to be removed or installed.

③:Fig. No. showing Procedure of Part Location.

④:Identification of part to be removed, unhooked, released.

S=Screw L=Looking Tab HK=Hook CN, LD=Connector 2(S-1)=2 Screws (S-1)

⑤:Installing Information

Reference Notes in the Table.

1. Re: Fig. CAB1 on Page 1-16

1) Disconnect the DC Cable.

2) Lift up the AC Adapter Unit by pressing Portion (A).

2. Re: Fig. CAB2 on Page 1-17

1) Remove 2 Screws (S-1).

2) Release 4 Locking Tabs (L-1), then remove the AC Adapter top.

3) Release 4 Locking Tabs (L-2).

3. Re: Fig. CAB3 on Page 1-17

1) Remove 3 Screws (S-3a), Screw (S-3b), and 2 Screws (S-4)

2) Disconnect the connectors (CN101), (LD101).

4. Re: Fig. CAB4 on Page 1-18

1) Turn on the power and push the Eject button to put the unit in cassette up condition.

2) Remove 2 Screws (S-2) and unhook 2 Hooks (HK-1).

5. Re: Fig. CAB4 on Page 1-18 and Fig. CAB6 on Page 1-20

1) Remove 3 Screws (S-5).

2) Disconnect the connectors (CN01), (CN02), (CN14).

6. Re: Fig. CAB4 on Page 1-18 and Fig. CAB6 on Page 1-20

- 1) Remove 2 Screws (S-6a) and 2 Screws (S-6b).
- 2) Lift the control door as shown by the arrow (A) and remove this control door by pushing its base part close to the hinge toward the front side of the unit.
- 3) Release 3 Locking Tabs (L-3).
- 4) Disconnect the connectors (CN801), (LD181), (LD182).

7. Re: Fig. CAB5 on Page 1-19 and Fig. CAB6 on Page 1-20

- 1) Remove all the related wires, then pull out the CRT CBA.

8. Re: Fig. CAB5 on Page 1-19

- 1) Remove the connector (CN501) and Anode Cap.
- 2) Lift the rear side of the CRT as shown by the arrow (B) and remove it from the cabinet.
- 3) Remove 4 Screws (S-7).

9. Re: Fig. CAB5 on Page 1-19

- 1) Disconnect the ANT Cable.
- 2) Release 6 Locking Tabs (L-4), then the TV Main/DC-DC CBA can be removed.

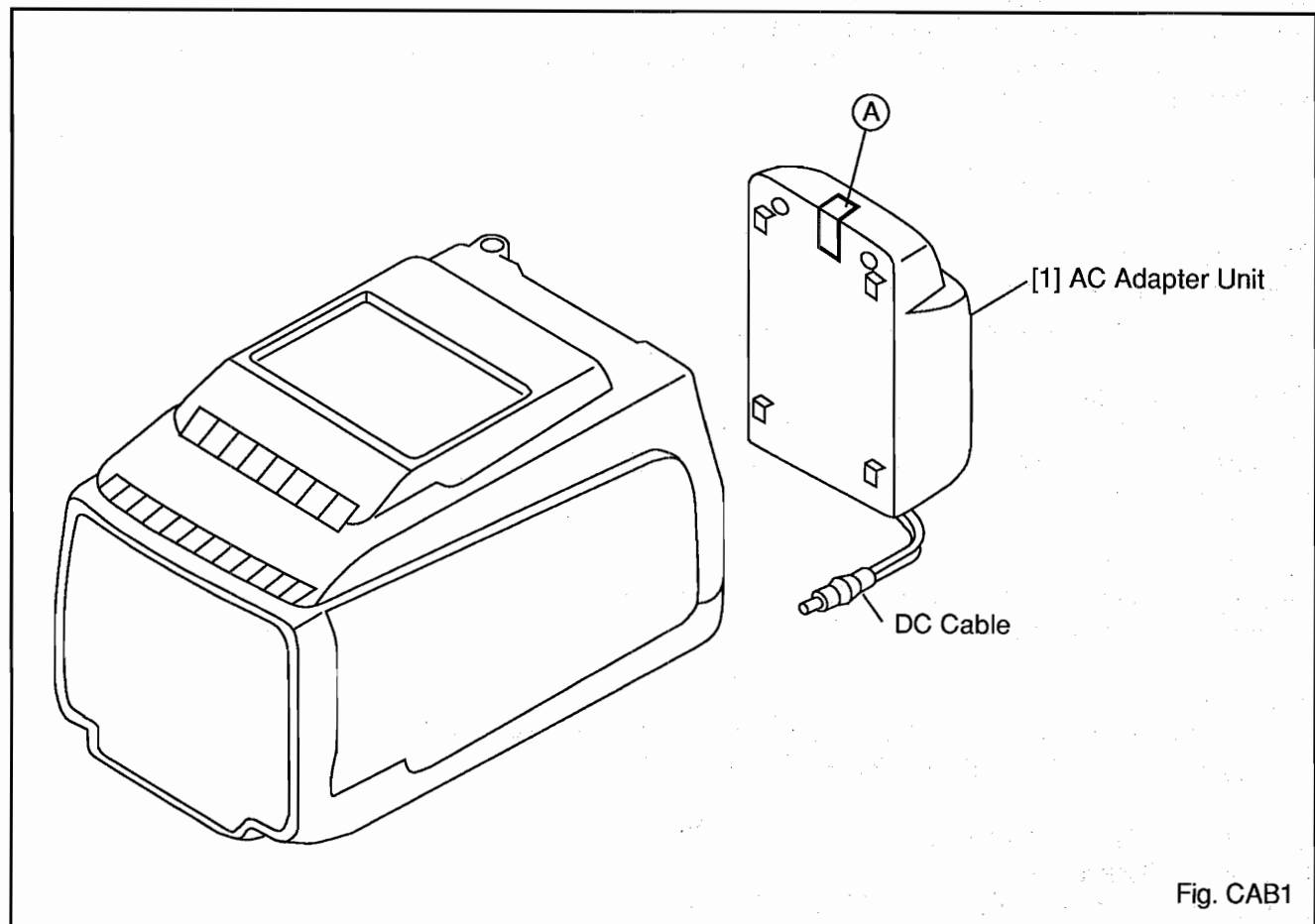
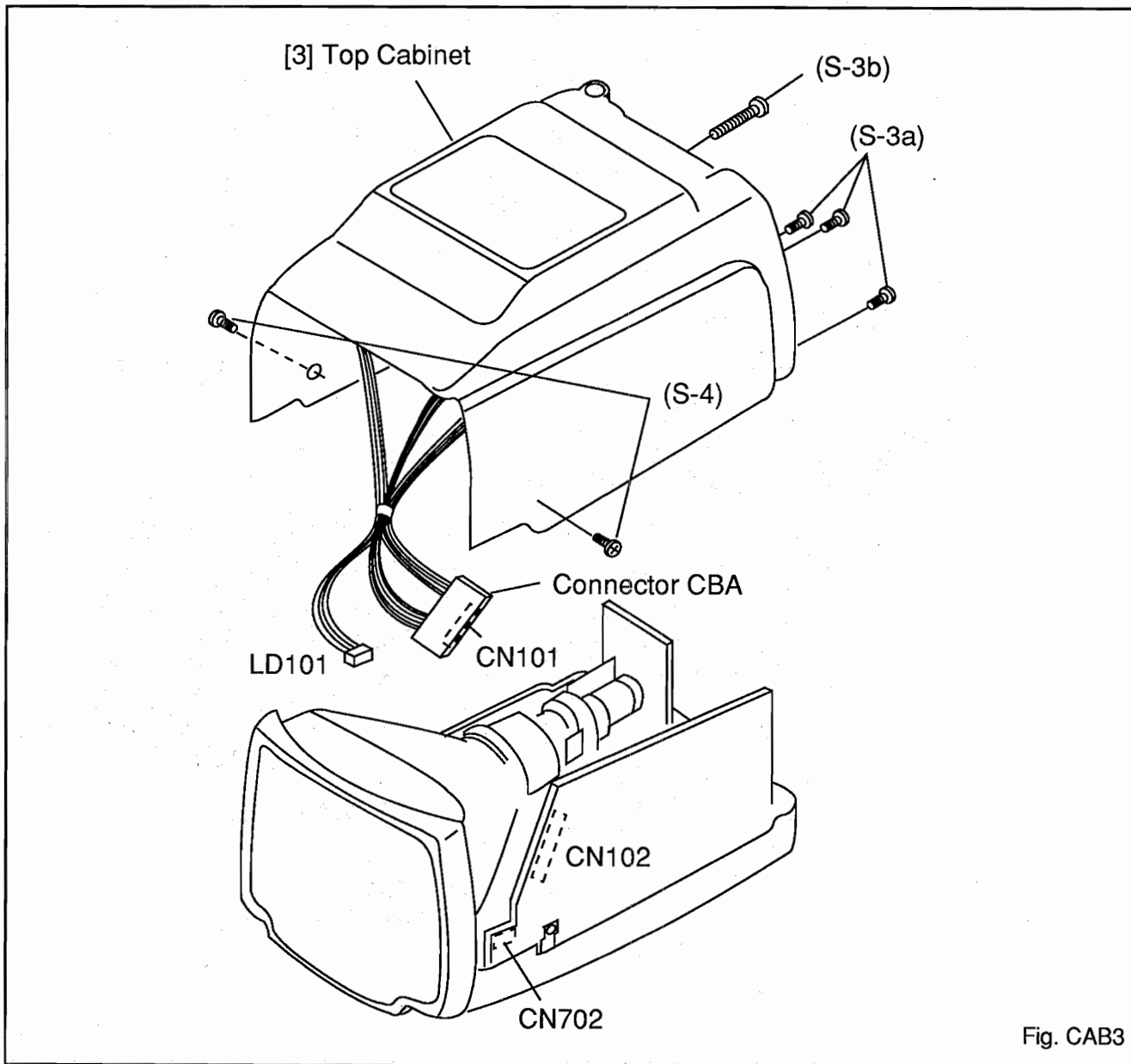
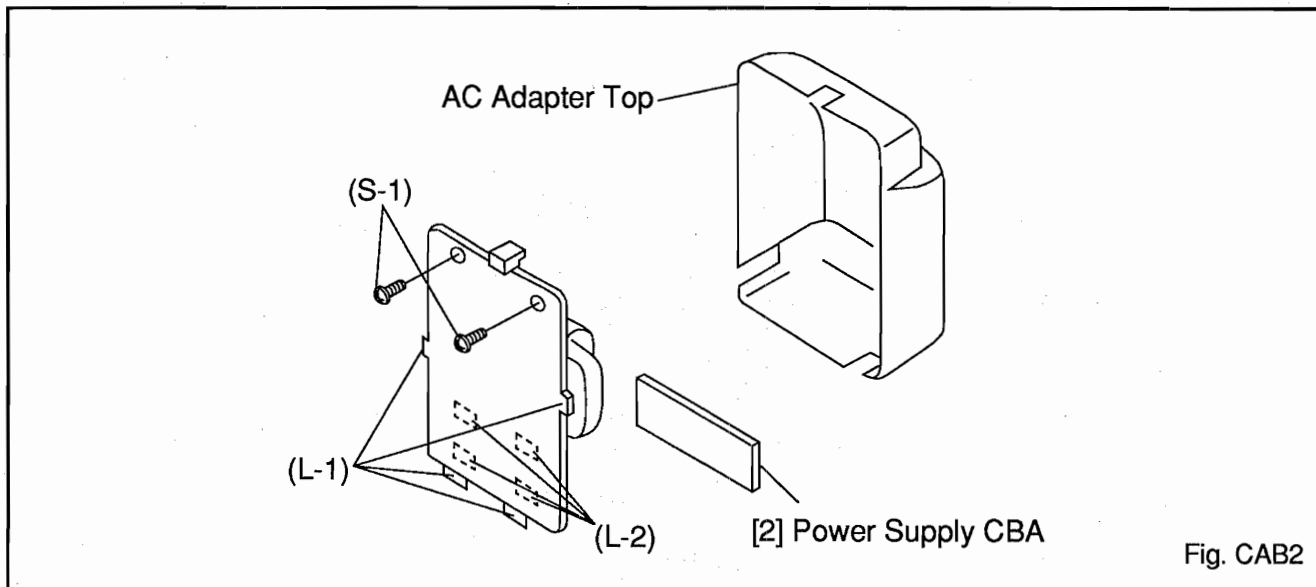
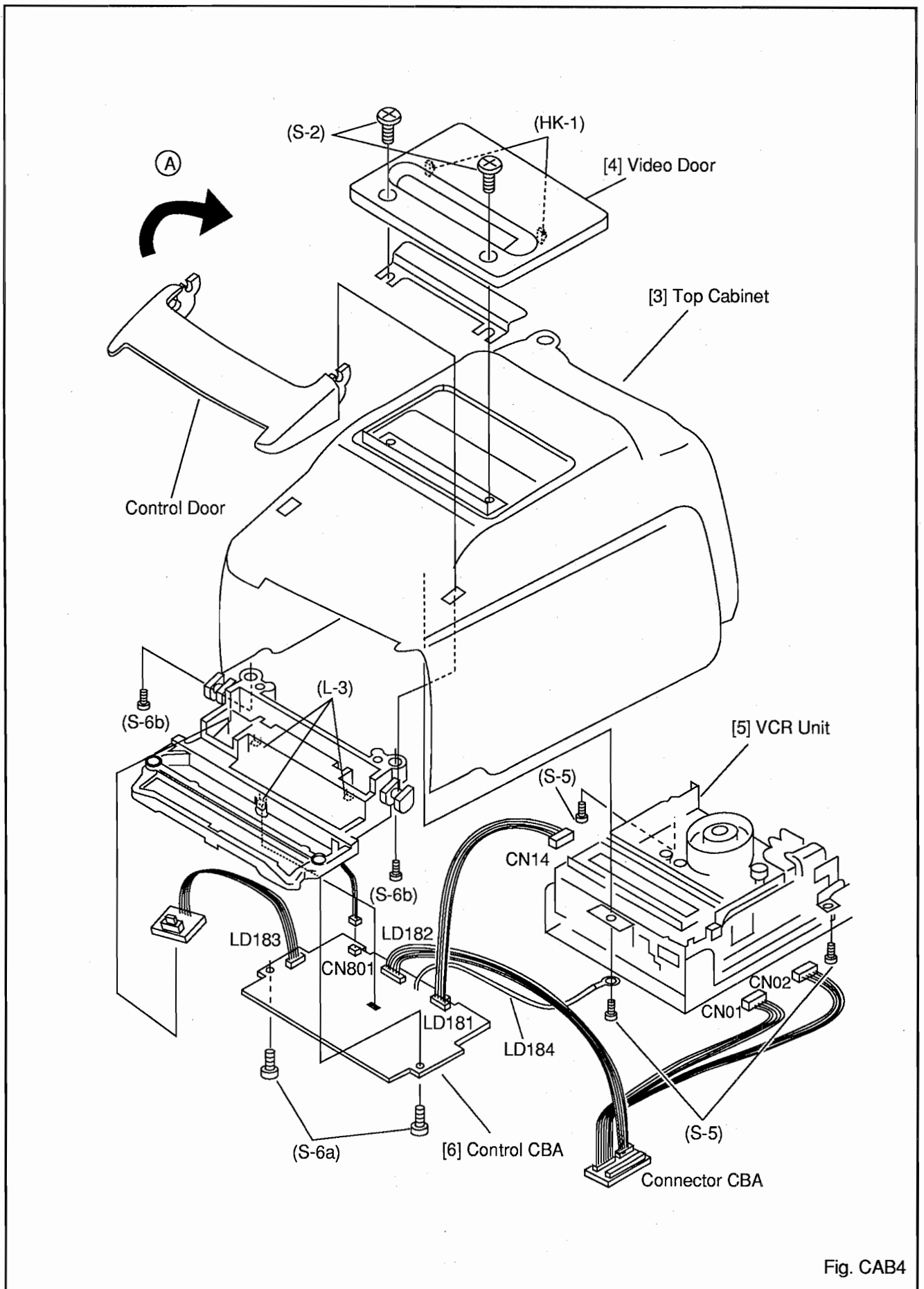


Fig. CAB1





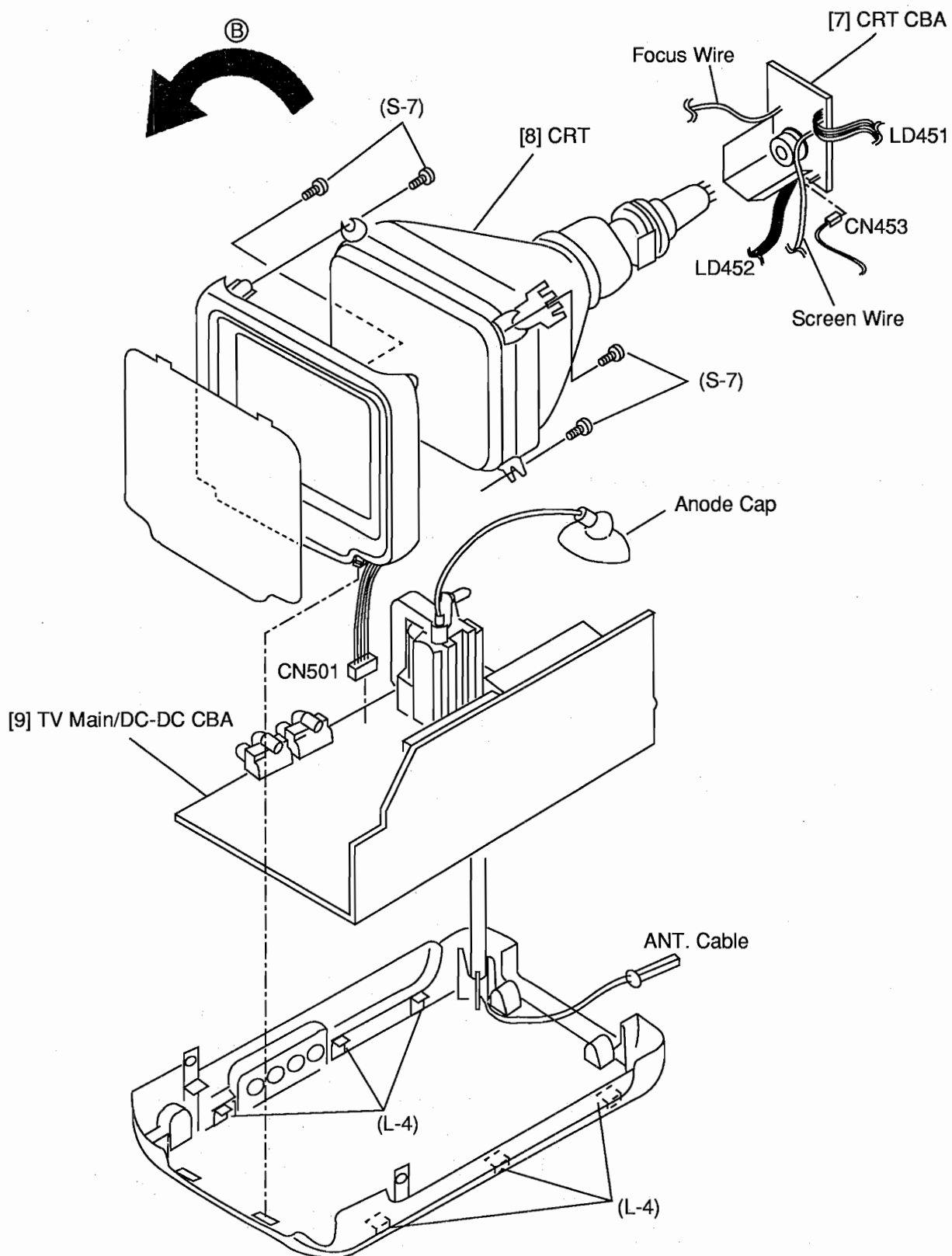
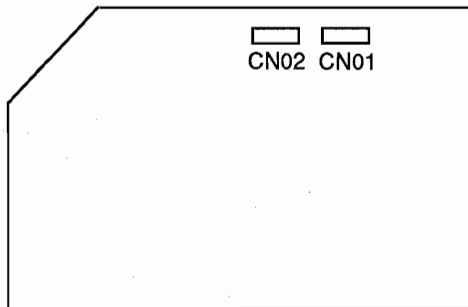
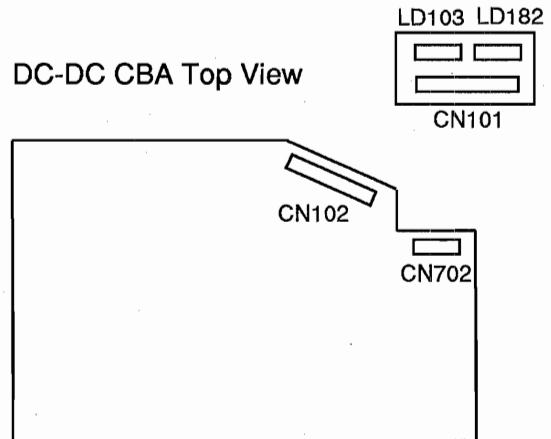


Fig. CAB5

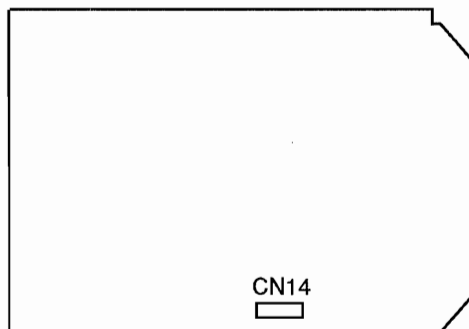
VCR Main CBA Top View



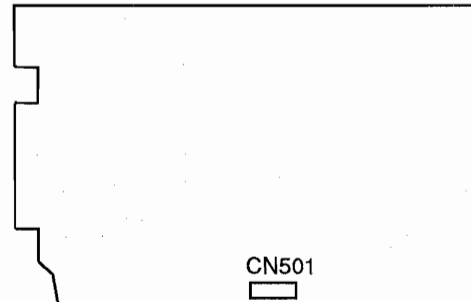
Connector CBA Top View



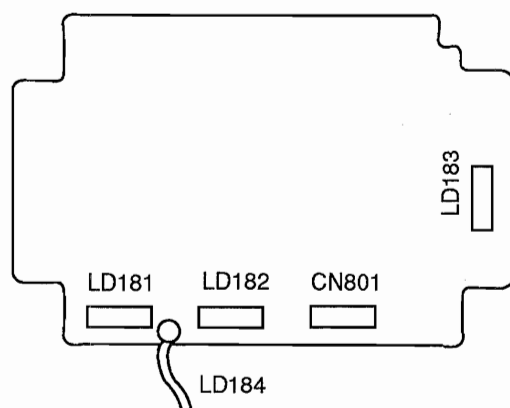
Servo/System Control CBA Top View



TV Main CBA Top View



Control CBA Top View



CRT CBA Top View

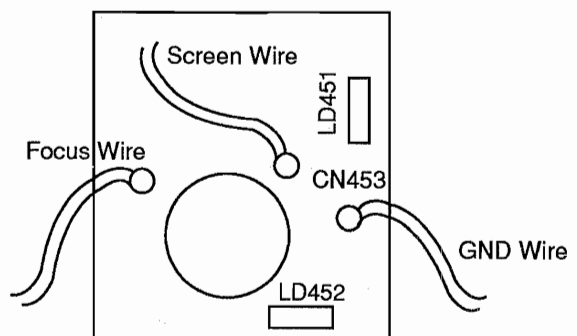


Fig. CAB6

VCR CABINET DISASSEMBLY INSTRUCTIONS

1. VCR Main CBA Removal

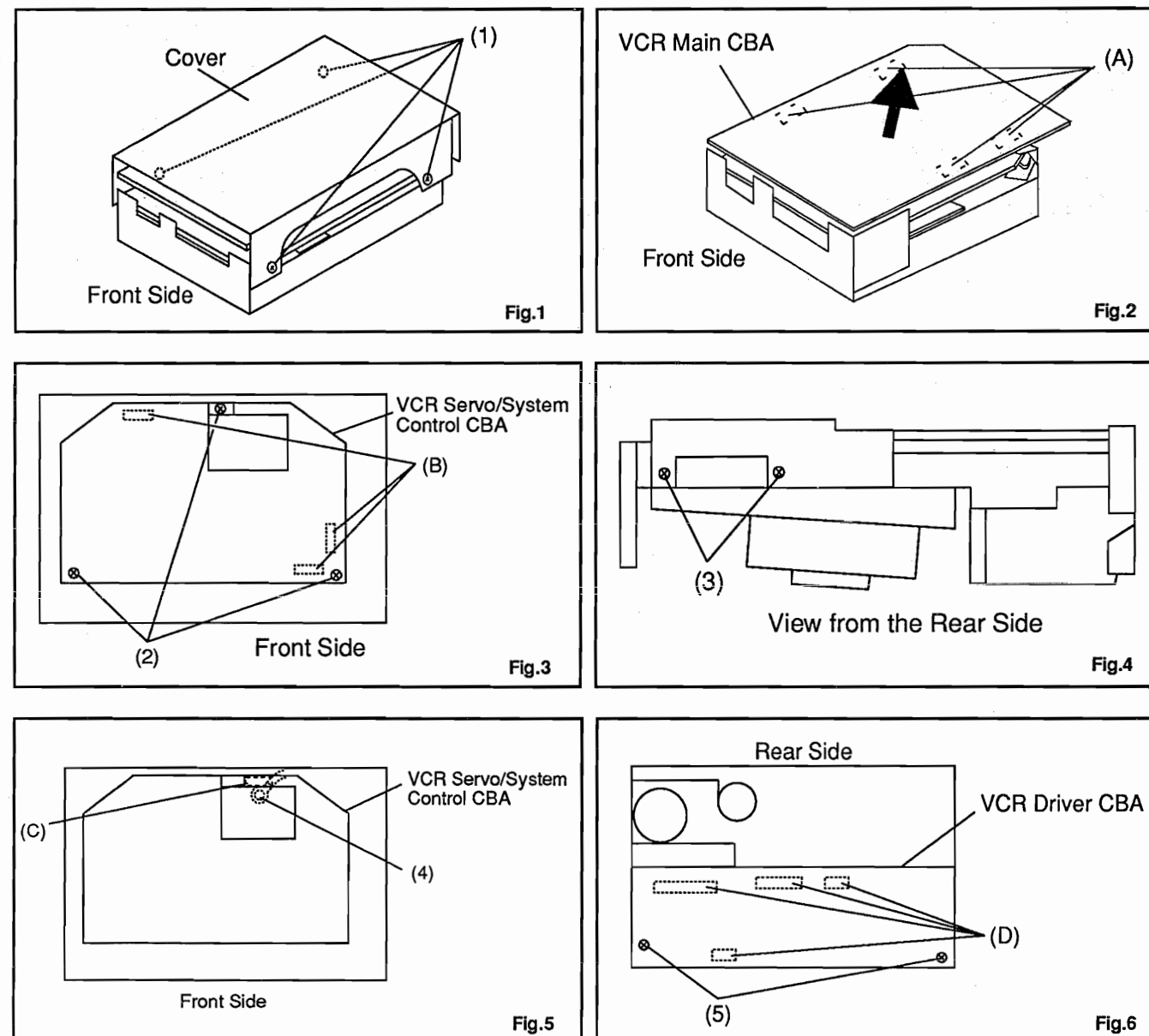
- Remove 4 screws (1) to take the cover off. (Fig.1)
- Disconnect 4 connectors (A) first, and lift the VCR Main CBA as shown by the arrow in Fig.2.

2. VCR Servo/System Control CBA Removal

- Disconnect 3 connectors (B) first, then remove 3 screws (2). (Fig.3)
- Remove 2 screws (3). (Fig.4)
- Disconnect connector (C) on the CBA first, then remove screw (4) which fastens grounding wires to the deck chassis behind this CBA. (Fig.5)
- To reinstall, reverse the above procedure.

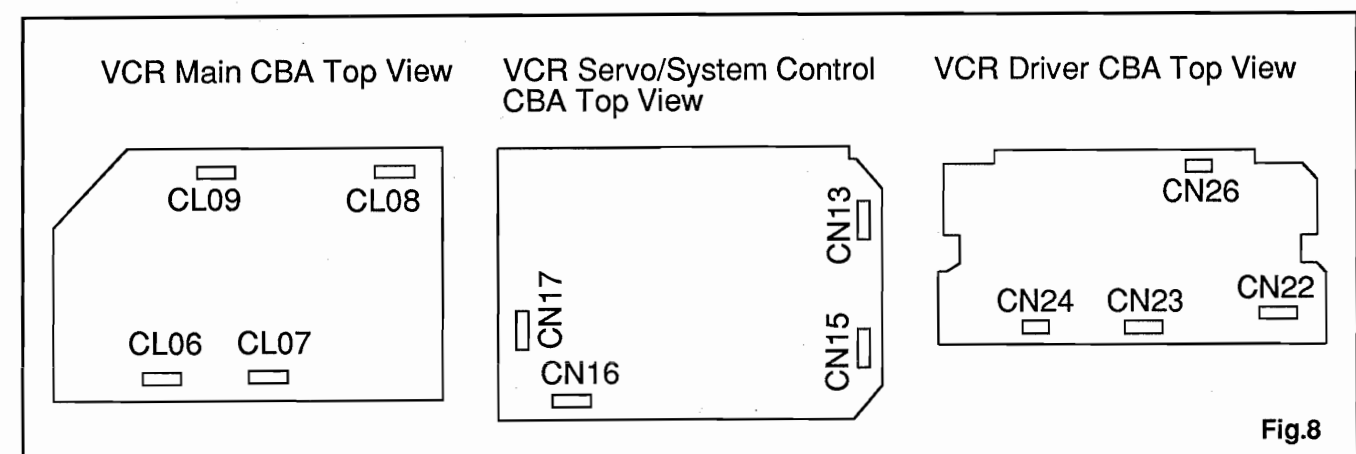
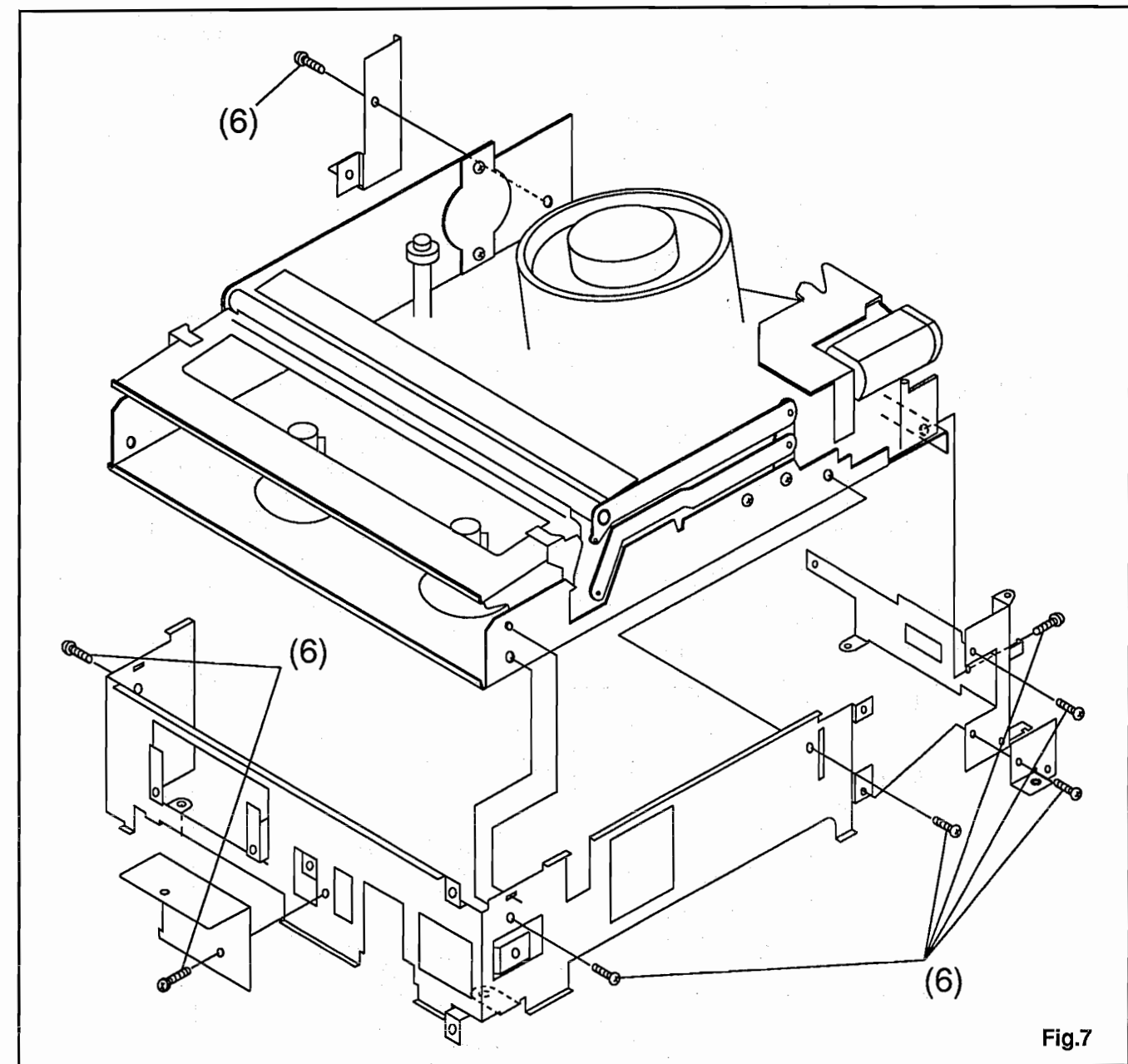
3.VCR Driver CBA Removal

- Disconnect 4 connectors (D) first, then remove 2 screws (5). (Fig.6)



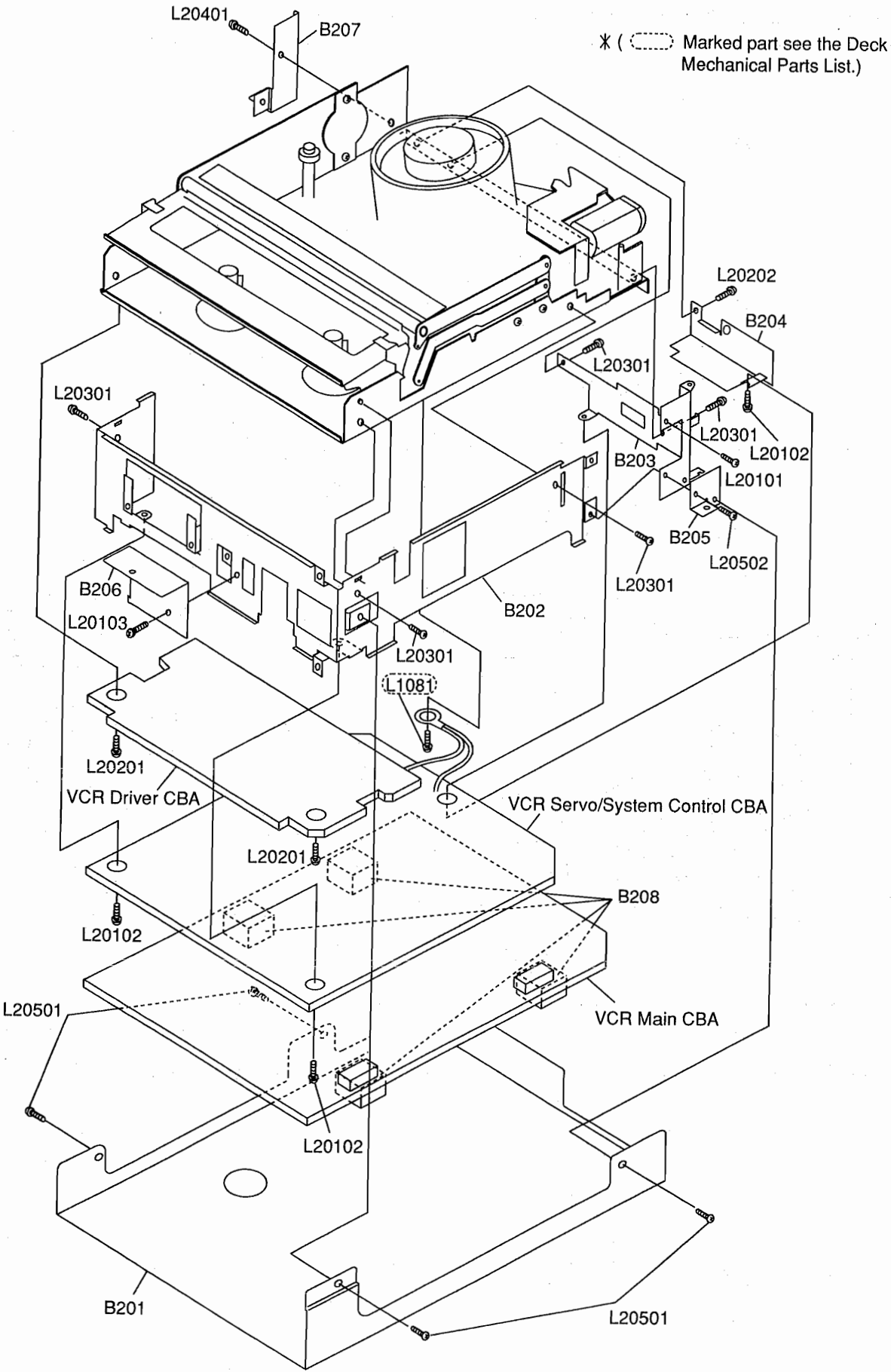
4. Removal of the plates on the chassis

- Remove 8 Screws (6) to remove the plates on the chassis. (Fig.7)



VCR CABINET EXPLODED VIEW

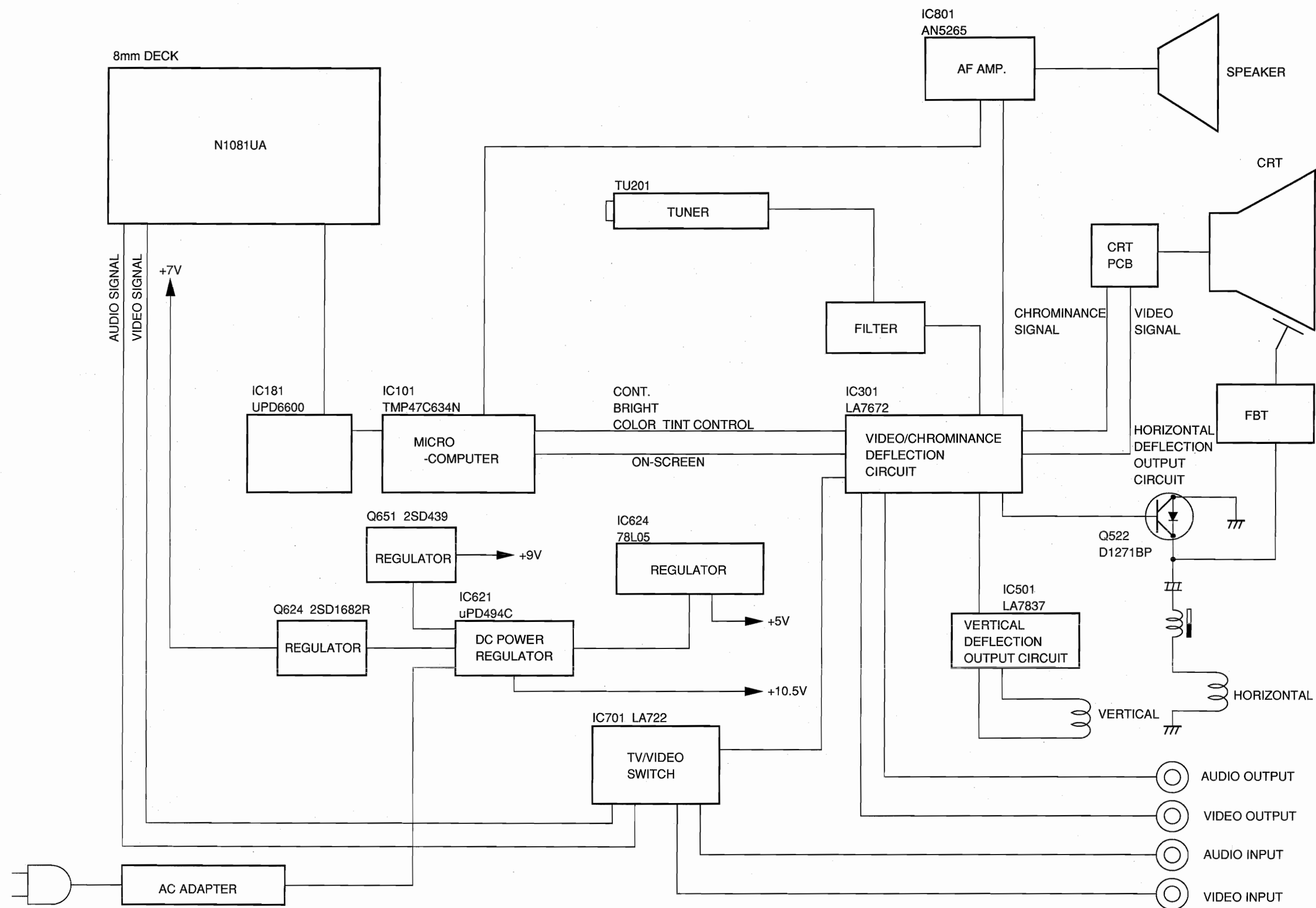
VCR CABINET PARTS LIST



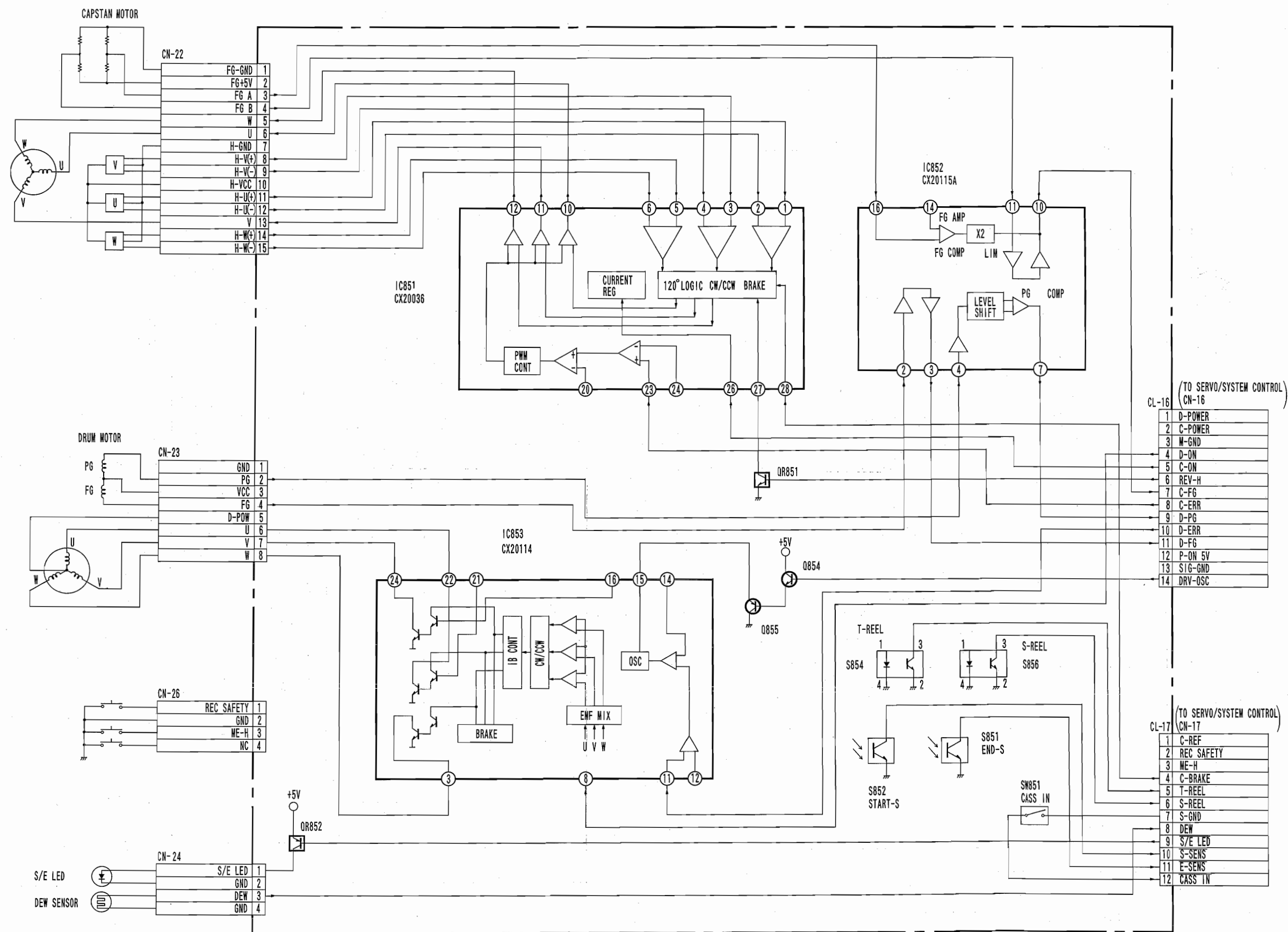
PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice of this service manual. Don't degrade the safety of the product through improper servicing.

Ref. No.	Description	Part No.
B 201	Deck Shield	OVM301521
B 202	Sub Chassis	OVM200748
B 203	Bracket, Mechanism Chassis	OVM300875
B 204	Shield Plate	OVM301247
B 205	Deck Holder A	OVM403921
B 206	Deck Holder C	OVM403922
B 207	Deck Holder B	OVM403878
B 208	Spacer, PCB	OVM404026
DK1	Deck Mechanism Assembly	C1803UA
L 1081	(See the Deck Mechanical Parts List.)	
L20101	Accurate Screw S M2X3	MPKF2030
L20102	Accurate Screw S M2X3	MPKF2030
L20103	Accurate Screw S M2X3	MPKF2030
L20201	Accurate Screw M1.6X4	MPKGG040
L20202	Accurate Screw M1.6X4	MPKGG040
L20301	Accurate Screw M1.6X2	MPNJJ020
L20302	Accurate Screw M1.6X2	MPNJJ020
L20401	Accurate Screw M1.6X3	MPKJJ030
L20501	Screw, S-Tight, M2X4 Bind +	GBMS2040
L20502	Screw, S-Tight, M2X4 Bind +	GBMS2040

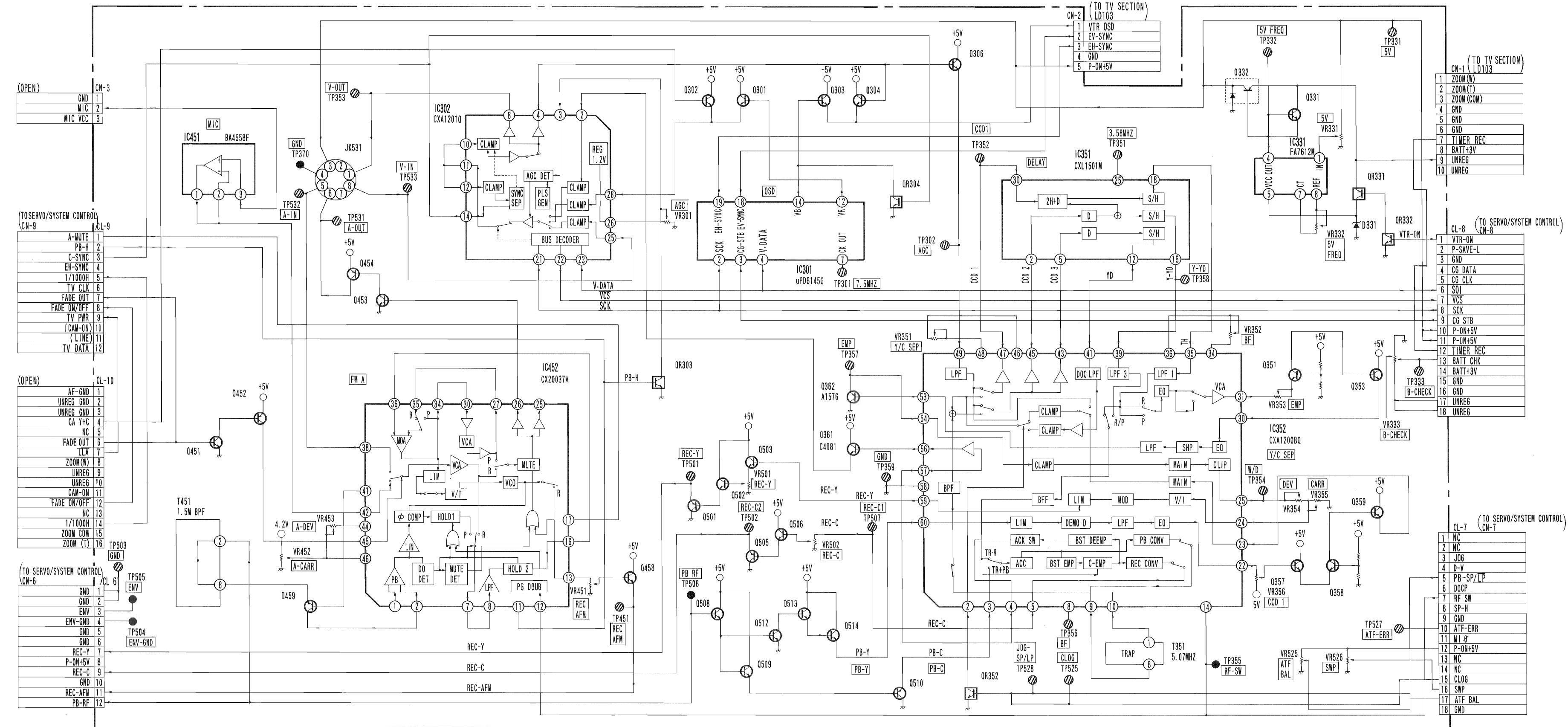
BLOCK DIAGRAMS



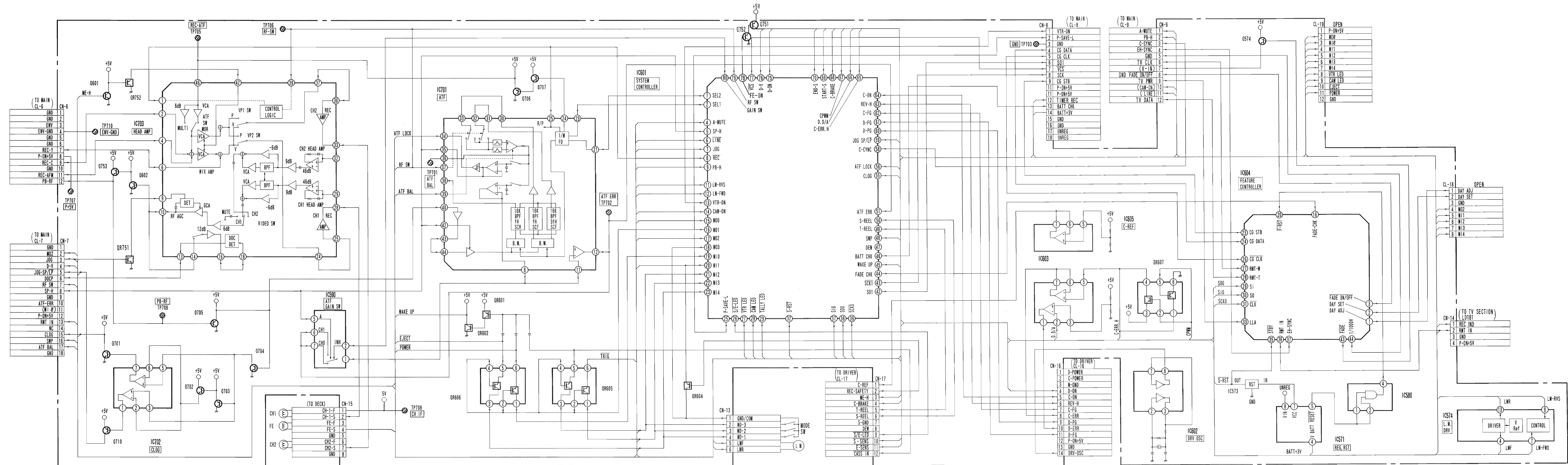
VCR Driver



VCR Main



VCR Servo/System Control



ELECTRICAL ADJUSTMENTS

Test Equipments and Tools Required:

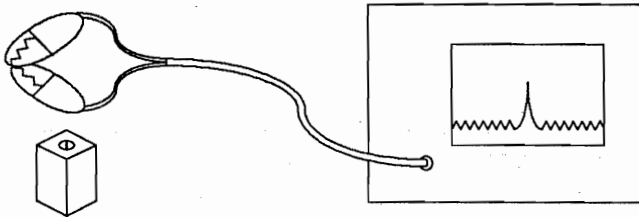
1. Spectrum Analyzer
2. Oscilloscope
3. Pattern Generator
4. DC Voltmeter
5. Frequency Counter
6. Alignment Tape (FM8A, Blank Tape)
7. AC Voltmeter (R. M. S.)
8. Vector Scope
9. TV Monitor
10. Electrolytic Capacitor, 16V 10 μ F (Avaivable Locally)
11. Load Resistor, 10k Ω (Avaivable Locally)

Precortion Before Adjustment

1. Set Brightness, Color, Contrast, and Tint to center.
2. All adjustments must be done in numbered order.
3. "M.EQ." is abbreviation of "Measurement Equipment".

TV Electrical Adjustment

1. VCO Adjustment

Test Point	Adjust Point	Mode	Input
Pin 2 of IC301	L225	---	
Equipment		Specification	
Spectrum Analyzer		45.75 ±0.05 MHz	
Connections of M. EQ.			
L225 			

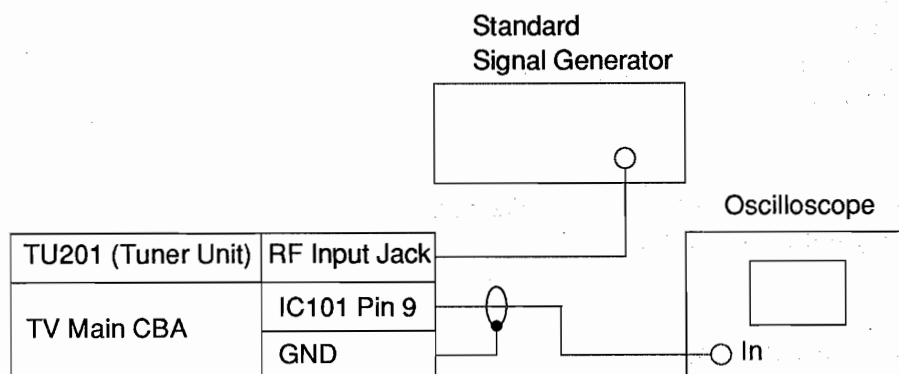
Reference notes:

1. Connect Pin 2 of IC301 to GND.
2. Set the spectrum analyzer as shown in the above table. (Make a loop by connecting both probes of the spectrum analyzer and bring the loop near by L225 to pick up the leakage wave.)
3. Adjust L225 for reading 45.75 $\pm$ 0.05MHz on the Spectrum Analyzer.

2. AFT Adjustment

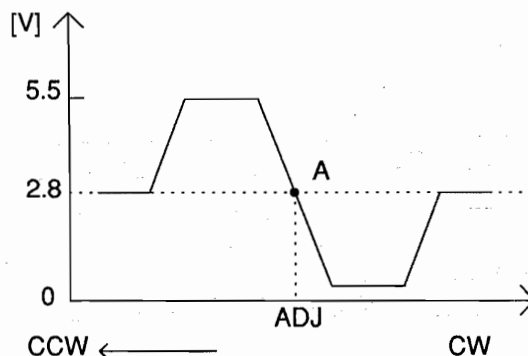
Test Point	Adjust Point	Mode	Input
Pin 9 of IC101	L226	---	Color bar or Monoscope
Equipment		Specifications	
Oscilloscope Standard Signal Generator		2.8 $\pm$ 0.2 V	

Connections of M. EQ.



Figure

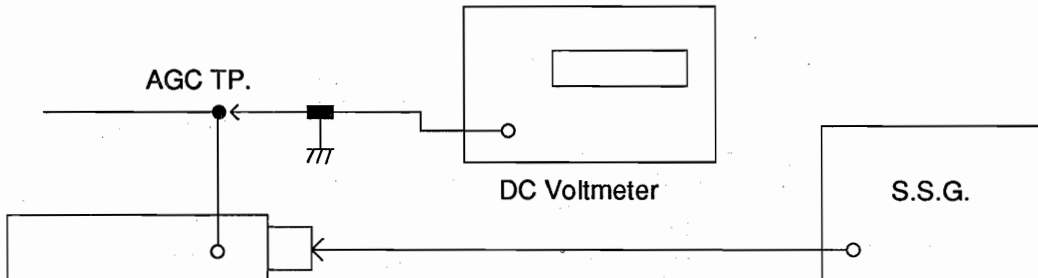
This isn't shown on the oscilloscope.



Reference notes:

1. Connect equipment as shown in the above table.
2. Disconnect the antenna and connect the equipment, and select no signal channel.
3. After a few seconds, inject the color bar or monoscopic pattern signal through the RF input terminal.
4. Short "TP01 and TP02" (See Page 1-58) to enter AFT OFF Mode.
5. Turn the core of L226 fully counterclockwise. (Approx 2.8V obtained on the oscilloscope.)
6. Turn the core of L226 clockwise and find the point where the voltage drops from approx 5.5V to 0V immediately on the oscilloscope.
7. Turn the core of L226 little by little and find the point shown by A in the figure above where 2.8 $\pm$ 0.2V is obtained.

3. AGC Adjustment

Test Point	Ajust Point	Mode	Input
AGC test point	VR221	USA 4 ch (67.25MHz)	Color bar (RF input level: 80dBμV / P/S ratio: 6dB)
Equipment		Specifications	
DC Voltmeter Standard Signal Generator		3.1±0.1 V	
Connections of M. EQ.			
 The diagram illustrates the test setup for the AGC adjustment. A Tuner TU201 is connected to an AGC TP. (AGC Test Point). The AGC TP. is connected to a DC Voltmeter. The DC Voltmeter is connected to the S.S.G. (Standard Signal Generator). The S.S.G. is also connected to the Tuner TU201.			

Reference notes:

1. Connect equipment as shown in the above table.
2. Adjust VR221 for reading 3.1±0.1V on the DC Voltmeter.

4. TV + B Adjustment

Test Point	Adjust Point	Mode	Input
---	VR621	USA 4 ch (67.25MHz)	Color bar 80dB μ V
Equipment		Specifications	
DC Voltmeter		10.5 $\pm$ 0.1V	

Connections of M. EQ.

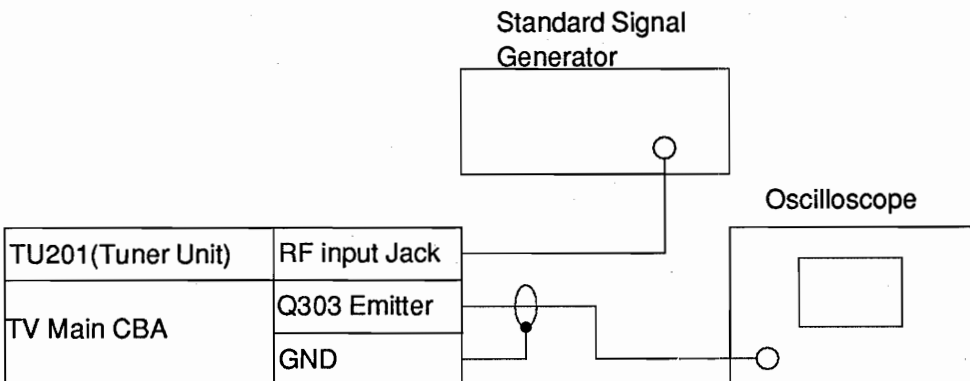
The diagram illustrates the electrical connection for adjusting the TV + B parameter. It features an inductor L623 in series with a capacitor C635 to ground. A tap point on the inductor is connected to a black adjustment point labeled 'TV + B (10.5 $\pm$ 0.1V)', which is also grounded. This adjustment point is connected to the positive input of a DC Voltmeter. The DC Voltmeter is represented by a box containing a display window and a 12V source symbol on its negative input terminal.

Reference notes:

DC Input: 12V

1. Connect equipment as shown in the above table.
2. Adjust VR621 for reading 10.5±0.1V on the DC Voltmeter.

5. Sub Bright Adjustment

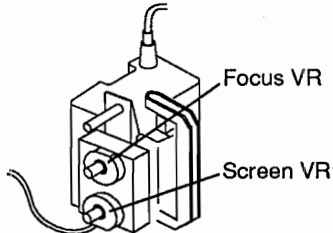
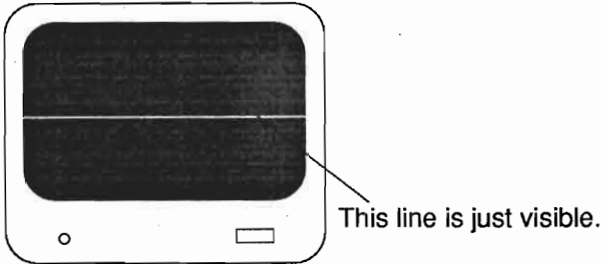
Test Point	Adjust Point	Mode	Input
Screen	VR301	USA 4 ch	Black Raster
Equipment		Specifications	
Oscilloscope		4.4±0.05V	
Standard Signal Generator		(W/O Preset All Controls: 4.6v±0.05V)	
Connections of M. EQ.			
			

Reference notes:

1. Input Black Raster through the RF input terminal.
2. Set BRIGHT control to the center.
3. Short TP01 and TP02 to enter Service Mode.
4. Adjust VR301 so that the voltage of Q303 (Emitter) becomes $4.4 \pm 0.05V$.
5. Make TP01 and TP02 open-circuited to exit from Service Mode.

Note: TP01 and TP02 are pointed in the Control CBA Bottom View.

6. CUT OFF Adjustment

Test Point	Adjust Point	Mode	Input
Screen	VR452 VR453 VR455 Screen-VR	---	Black Raster
Equipment		Specification	
Standard Signal Generator		See below	
Figure			
 			

Reference notes:

1. Operate the unit more than 15 minutes.
2. Degauss the CRT using a Degaussing Coil.
3. Inject Black Raster. (Set the Red, Green, and Blue signals to OFF on the SSG or set APL to 0%.)
4. Turn the Screen-VR on the FBT fully counterclockwise, and set VR451(R. Drive), VR454 (B. Drive), and VR301 (Sub Bright) to neutral.
5. Short TP01 and TP02 to enter Service Mode.
6. Turn the Screen-VR to the point where the horizontal bar just illuminates.
7. Adjust VR452, VR453, and VR455 so that the horizontal line is just visible.
8. Make TP01 and TP02 open open-circuited to exit Service Mode.

Note:

1. Confirm that the White Balance Adjustment is correct after this adjustment, and attempt White Balance Adjustment if needed.
2. This adjustment without the Black Raster may cause to fail the CRT screen.
3. If your SSG cannot generate a Black Raster, cut or desolder the Y-signal wire of LCN451 after entering Test Mode instead of using a Black Raster.

7. WHITE BALANCE Adjustment

Test Point	Adjust Point	Mode	Input
Screen	VR451(R.Drive) VR454 (B.Drive)	---	Color Bar
Equipment		Specification	
Standard Signal Generator		See "Reference notes" below	

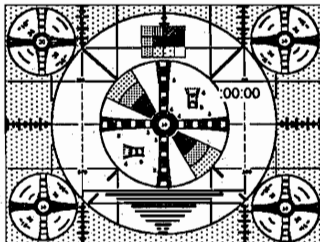
Reference notes:

1. Operate the unit for more than 30 minutes.
2. Degauss the CRT using a Degaussing Coil. Face the unit to the east.
3. Inject a Color Bar signal.
4. Adjust the VR451(R.Drive) and VR454 (B.Drive) so the white area is shown in pure white. (8500°K-20MPCD)

Note:

Confirm that the Cut Off Adjustment is correct after this adjustment, and attempt Cut Off Adjustment if needed.

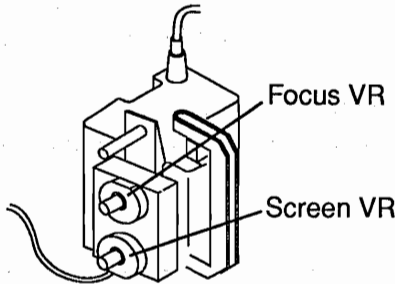
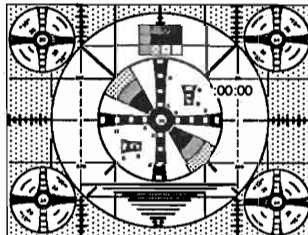
8. V. SIZE Adjustment

Test Point	Adjust Point	Mode	Input
Screen	VR501	---	Monoscope
Equipment		Specification	
Standard Signal Generator		See below	
Figure			
			

Reference notes:

1. Operate the unit more than 30 minutes.
2. Degauss the CRT using a Degaussing Coil. Face the unit to the east.
3. Inject the Monoscopic Pattern signal.
4. Adjust the VR501 until the circle becomes round.

9. FOCUS Adjustment

Test Point	Adjust Point	Mode	Input
Screen	Focus VR.	---	Monoscope
Equipment		Specification	
Standard Signal Generator		See below	
Figure			
 Focus VR Screen VR 			

Reference notes:

1. Operate the unit more than 30 minutes.
2. Degauss the CRT using a Degaussing Coil. Face the unit to the east.
3. Inject the Monoscopic Pattern signal.
4. Adjust the Focus-VR of the FBT to obtain a clear picture.

Video Electrical Adjustment

How to Set Up the E-E Mode

(Signal Input from Pattern Generator and Audio Oscillator)

1. Connect the TV monitor to Video Out (J703) and Audio Out (J704) on the TV unit.
2. Connect the Pattern Generator to Video In (J701).
3. Connect the Audio Oscillator through the Attenuator to Video In (J701).
4. Connect the DC Power Supply ($DC 7.5 \pm 0.1V$) to the TV unit.
Connect the DC Power Supply ($DC 6 \pm 0.1V$) to the VCR unit.

1.DC/DC Converter Voltage Adjustment

Test Point	Adjust Point	Mode	Input
TP331 (5V ADJ) TP503 (GND)	VR331 (5V ADJ)	E-E	---
Tape	M. EQ.	Specification	
---	DC Voltmeter	5.0±0.05V	
Connections of M. EQ.			

Main CBA
VR331 (5V ADJ)


TP331
(5V ADJ)

TP503
(GND)





DC Voltmeter

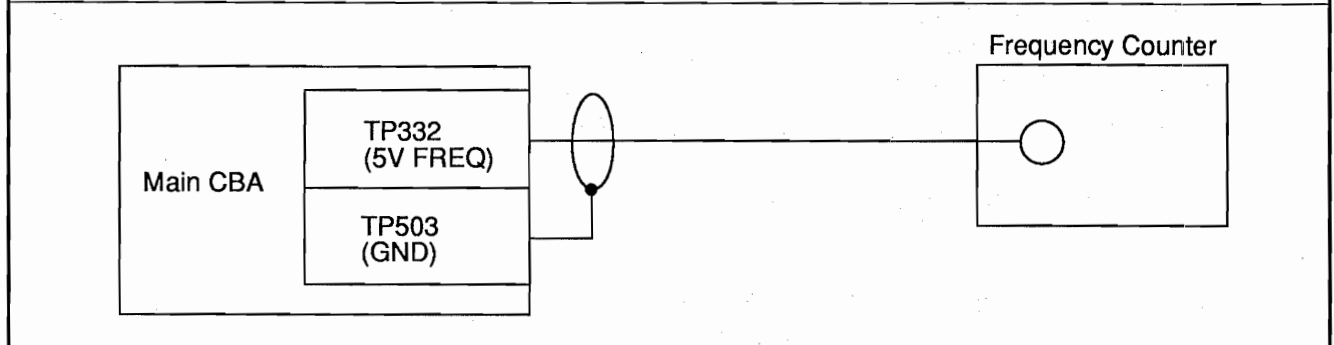
Reference Notes:

1. Connect equipment as shown in the above table.
2. Adjust VR331 to get a reading of 5.0 $\pm$ 0.05V between TP331 and TP503 on the DC Voltmeter.

2.DC/DC Converter Frequency Adjustment

Test Point	Adjust Point	Mode	Input
TP332 (5V FREQ) TP503 (GND)	VR332 (5V FREQ)	E-E	---
Tape	M. EQ.	Specification	
---	Frequency Counter	306.8±2.0kHz	

Connections of M. EQ.



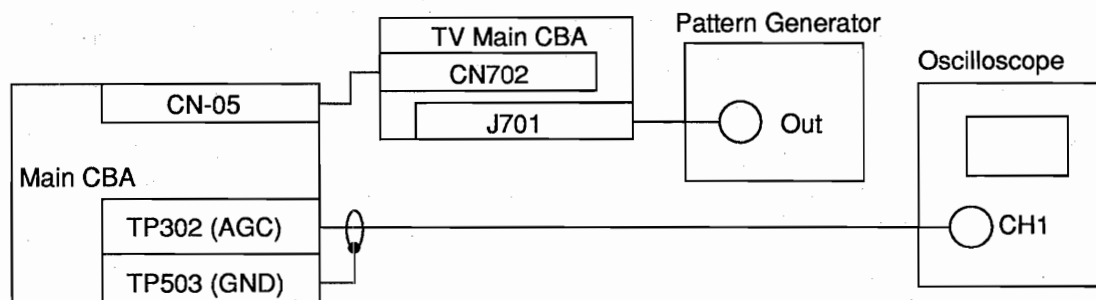
Reference Notes:

1. Connect equipment as shown in the above table.
2. Adjust VR332 for reading 306.8±2.0kHz on the frequency counter.

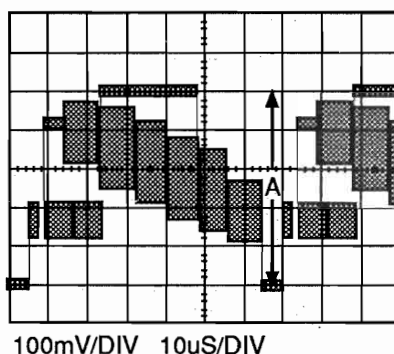
3.AGC Level Adjustment

Test Point	Adjust Point	Mode	Input
TP302 (AGC) TP503 (GND)	VR301 (AGC)	E-E	Color Bar W/IQ
Tape	M. EQ.	Specification	
---	Pattern Generator Oscilloscope	$A=0.5\pm0.02V_{p-p}$	

Connections of M. EQ.



Figure



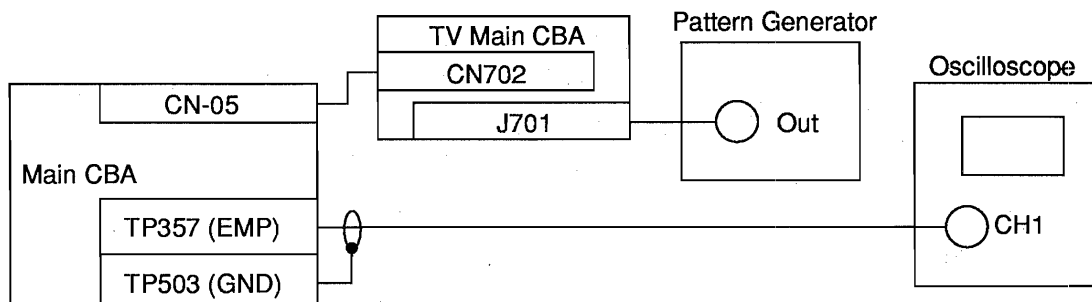
Reference Notes:

1. Connect equipment as shown in the above table.
2. Inject the color bar signal with white 100% to Video In (J701).
3. Adjust VR301 so that the AGC level becomes $0.5\pm0.02V_{p-p}$.

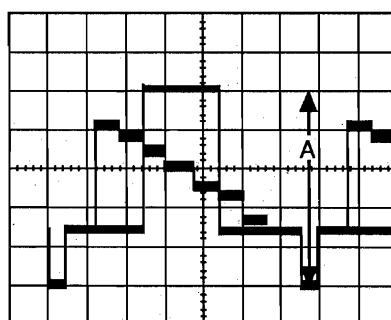
4.Emphasis Level Adjustment

Test Point	Adjust Point	Mode	Input
TP357 (EMP) TP503 (GND)	VR353 (EMP)	E-E	Color Bar W/IQ
Tape	M. EQ.	Specification	
---	Pattern Generator Oscilloscope	$A=0.5\pm0.02V_{p-p}$	

Connections of M. EQ.



Figure



100mV/DIV 10uS/DIV

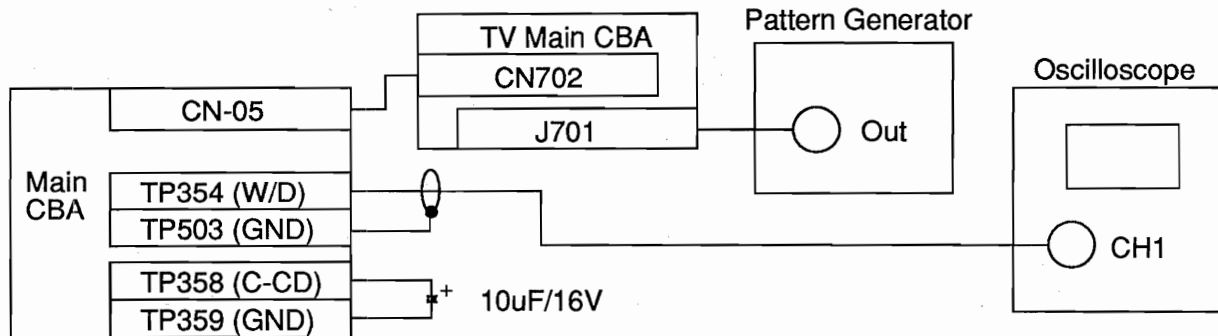
Reference Notes:

1. Connect equipment as shown in the above table.
2. Inject the color bar signal with 100% white to Video In (J701).
3. Adjust VR353 so that the emphasis level becomes $0.5\pm0.02V_{p-p}$.

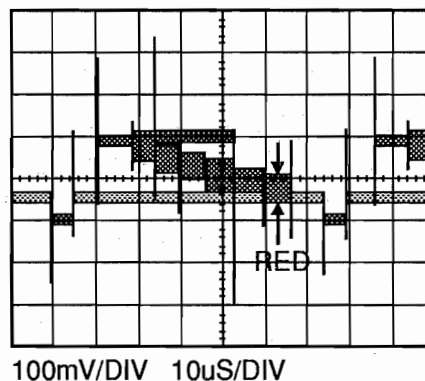
5.Y/C Separation Adjustment

Test Point	Adjust Point	Mode	Input
TP354 (W/D) TP503 (GND)	VR351 (Y/C SEP)	E-E	Color Bar W/IQ
Tape	M. EQ.	Specification	
---	Pattern Generator Oscilloscope	Red Color Level Minimum	

Connections of M. EQ.



Figure



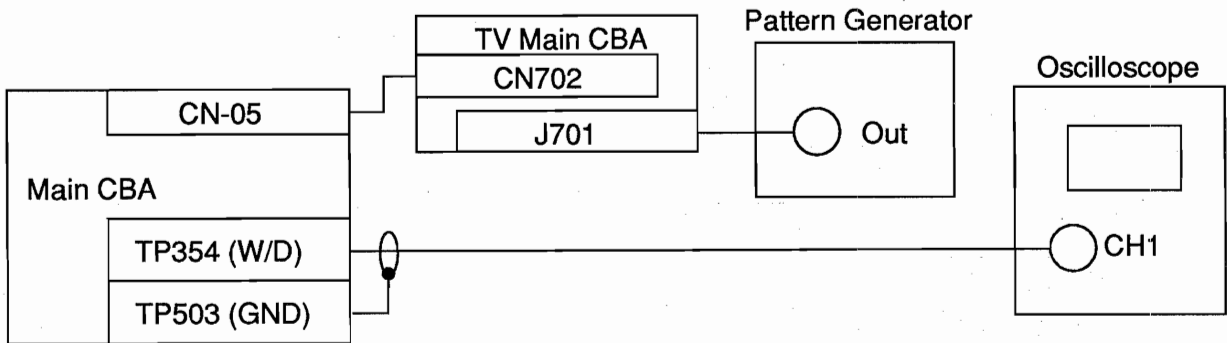
Reference Notes:

1. Connect equipment as shown in the above table. Connect TP358 (C-CD) and TP359 (GND) using the 10uF/16V electrolytic capacitor.
2. Inject the color bar signal with 100% white to Video In (J701).
3. Adjust VR351 to get the minimum level of "RED" at TP 354. See above the figure.

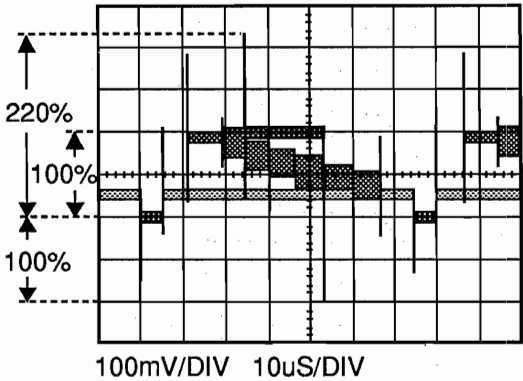
6.W/D Clip Confirmation

Test Point	Adjust Point	Mode	Input
TP354 (W/D) TP503 (GND)	---	E-E	Color Bar W/IQ
Tape	M. EQ.	Specification	
---	Pattern Generator Oscilloscope	W/Clip: 220±10% D/Clip: 100±10%	

Connections of M. EQ.



Figure

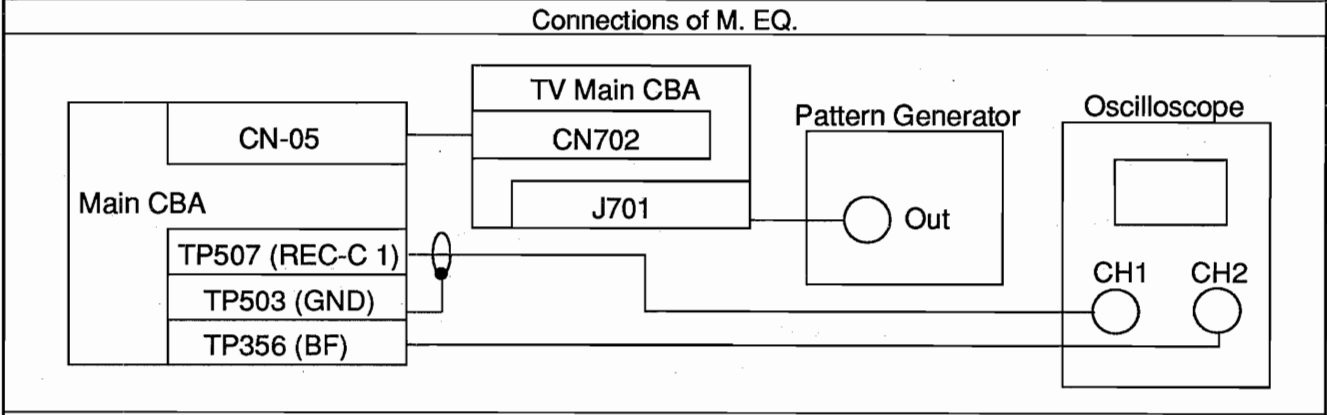


Reference Notes:

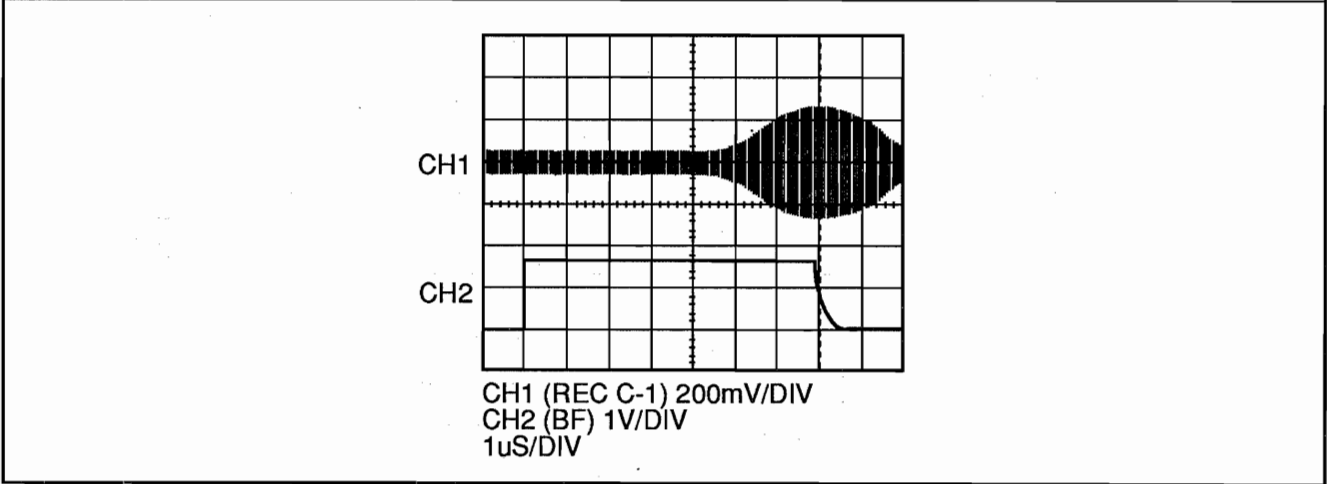
- 1. Connect equipment as shown in the above table.
- 2. Inject the color bar signal with white 100% to Video In (J701).
- 3. Check the white clip level and dark clip level to be as shown in the above figure .

7.Burst Flag Pulse Adjustment

Test Point	Adjust Point	Mode	Input
TP507 (REC-C 1) TP356 (BF) TP503 (GND)	VR352 (BF)	E-E	Color Bar W/IQ
Tape	M. EQ.	Specification	
---	Pattern Generator Oscilloscope	See below	



Figure



Reference Notes:

1. Connect equipment as shown in the above table.
2. Inject the color bar signal with white 100% to Video In (J701).
3. Set the trigger of the oscilloscope to CH2 (+).
4. Adjust VR352 so that the center of the color burst (TP507) aligns with the decline point of the burst flag pulse (TP356).

How to Set Up the Play Mode

1. Connect equipment with the same connections as E-E mode.
2. Insert a playback tape.
3. Set to play mode by pushing the PLAY button.

How to Set Up the Test Mode

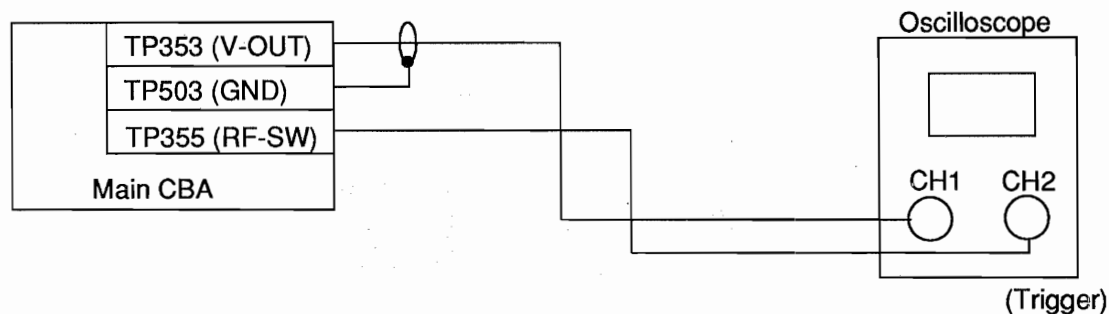
1. Connect equipment as in the E-E mode shown in "How to set up the E-E mode".
2. Short TP02 and TP03 on the Control CBA.

Note: Turn off the power to exit the Test Mode.

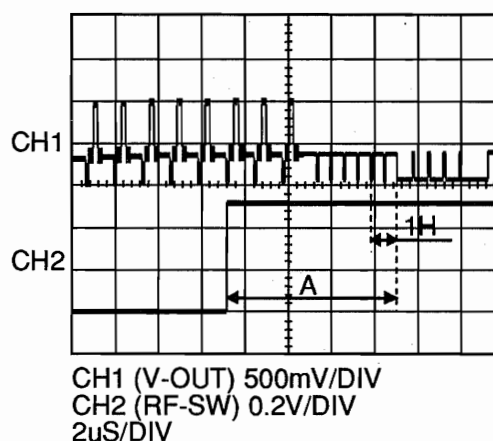
8.PB Switching Point Adjustment

Test Point	Adjust Point	Mode	Input
TP353 (V-OUT) TP503 (GND) TP355 (RF-SW)	VR526 (SWP)	Test Mode Playback	Test Tape
Tape	M. EQ.	Specification	
FM8A	Oscilloscope	$A = 6.5 \pm 0.5H$ ($410 \pm 31.5\mu s$)	

Connections of M. EQ.



Figure



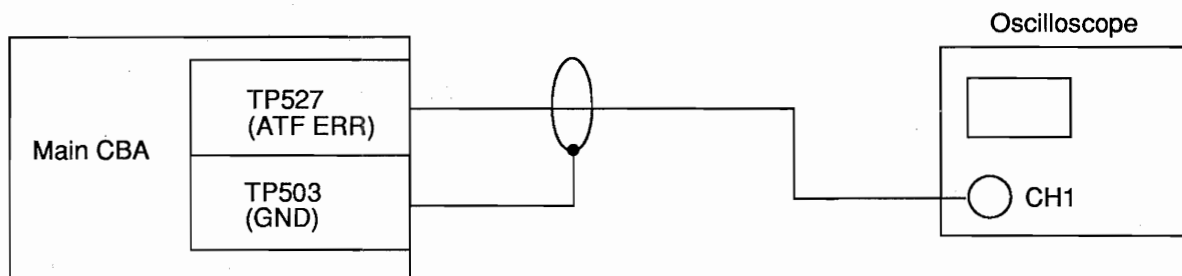
Reference Notes:

1. Connect equipment as shown in the above table.
2. Set the trigger of the oscilloscope to CH2 (+) trigger.
2. Play back the test tape FM8A and adjust VR526 so that the front edge of V-sync (CH1) delays $6.5 \pm 0.5H$ from the rising point of the RF SW Pulse (CH2).
3. Adjust Test mode and confirm Play back mode.

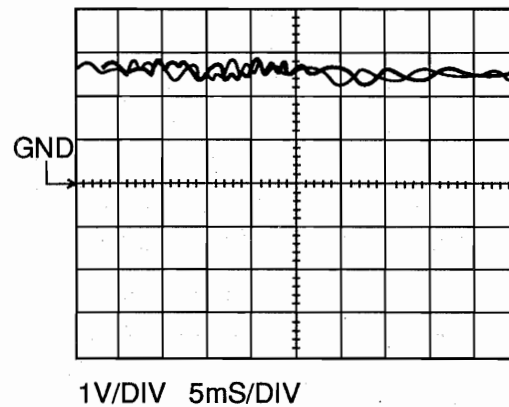
9.ATF Balance Adjustment

Test Point	Adjust Point	Mode	Input
TP527 (ATF ERR) TP503 (GND)	VR525 (ATF BAL)	Stop	---
Tape	M. EQ.	Specification	
---	Oscilloscope	A=2.5 ±0.02VDC	

Connections of M. EQ.



Figure



Reference Notes:

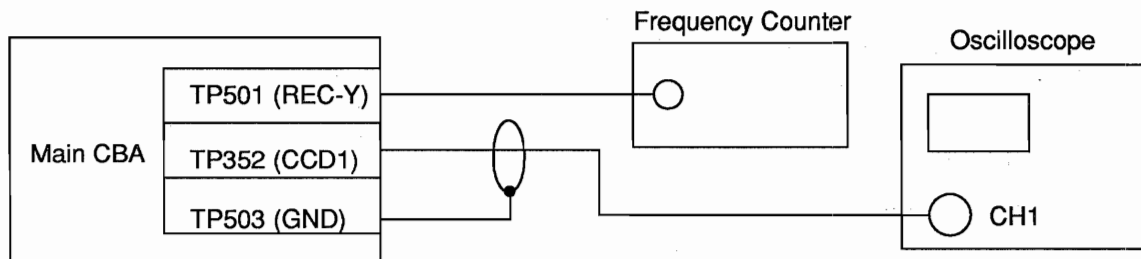
1. Connect equipment as shown in the above table.
2. Adjust VR525 so that the output level of ATF ERR becomes $2.5 \pm 0.02\text{VDC}$ at TP527.

Note: ATF=Automatic Tracking Frequency

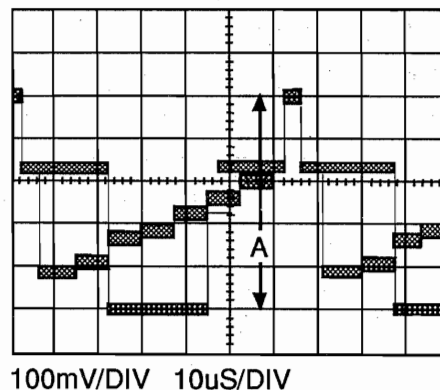
10.Luminance Carrier Set/Deviation Adjustment

Test Point	Adjust Point	Mode	Input
TP501 (REC-Y) TP352 (CCD 1) TP503 (GND)	VR355 (Luminance Carrier) VR354 (Luminance Deviation)	E-E PB REC	No Signal Color Bar W/IQ
Tape	M. EQ.	Specification	
Blank Tape	Oscilloscope Frequency Counter	Luminance Carrier: $4.38\text{MHz} \pm 20\text{kHz}$ Luminance Deviation: $A=0.5 \pm 0.02\text{V}$	

Connections of M. EQ.



Figure



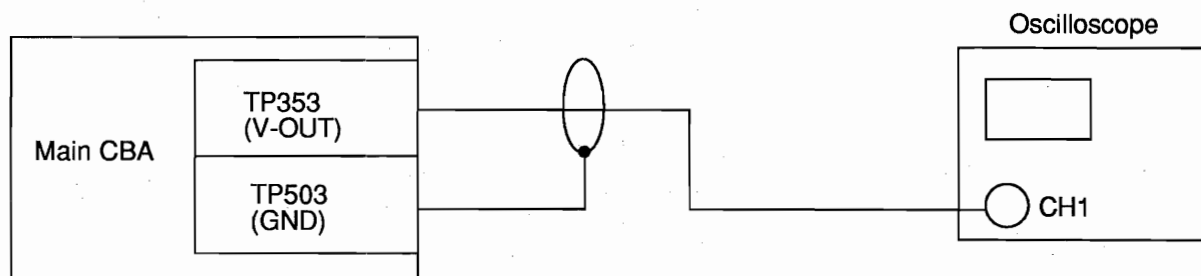
Reference Notes:

1. Connect equipment as shown in the above table.
2. Adjust VR355 so that when there is no signal, the frequency becomes $4.38\text{MHz} \pm 20\text{kHz}$.
3. Record the Color Bar W/IQ.
4. Play back the recorded portion and check that TP352 (CCD1) level becomes $0.5 \pm 0.02\text{V}$.
5. If not, adjust VR354 so that TP352 (CCD1) level becomes $0.5 \pm 0.02\text{V}$.

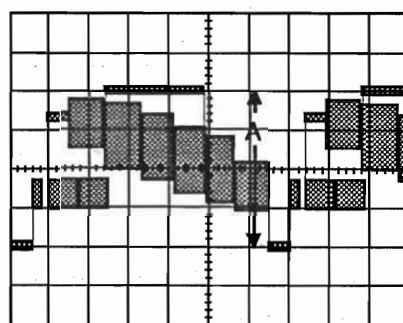
11.PB Level Checking

Test Point	Adjust Point	Mode	Input
TP353 (V-OUT) TP503 (GND)	---	Playback	Test Tape
Tape	M. EQ.	Specification	
FM8A	Oscilloscope	$A=2.0\pm0.05V_{p-p}$	

Connections of M. EQ.



Figure



0.5V/DIV 10uS/DIV

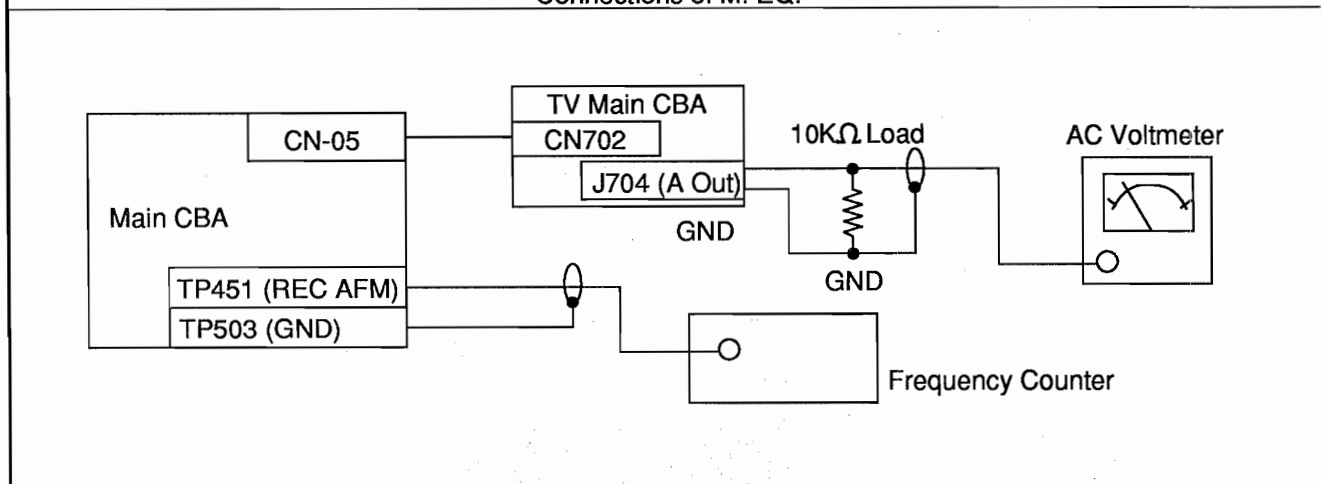
Reference Notes:

1. Connect equipment as shown in the above table.
2. Play back the test tape FM8A and check the playback level is $2.0\pm0.1V_{p-p}$.

12.FM Audio Carrier Set/Deviation Adjustment

Test Point	Adjust Point	Mode	Input
TP451 (REC AFM) TP503 (GND) J704 (A Out)	VR452 (Audio Carrier) VR453 (Audio Deviation)	E-E PB	No Signal
Tape	M. EQ.	Specification	
FM8A	AC Voltmeter Frequency Counter	Audio Carrier: 1.5MHz $\pm$ 20kHz Audio Deviation: -10 $\pm$ 0.5dBV	

Connections of M. EQ.



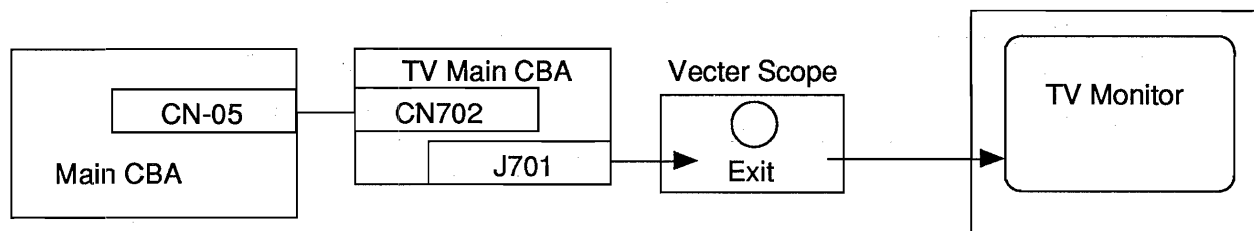
Reference Notes:

1. Connect equipment as shown in the above table.
2. Adjust VR452 so that the FM Audio Carrier Frequency becomes 1.5MHz $\pm$ 20kHz.
3. Load a 10KΩ resistor across J704 (Audio Out) terminals.
(Remove this resistor when adjustment is completed.)
4. Play back the test tape FM8A and adjust VR453 so that the playback level becomes -10 $\pm$ 0.5dBV.

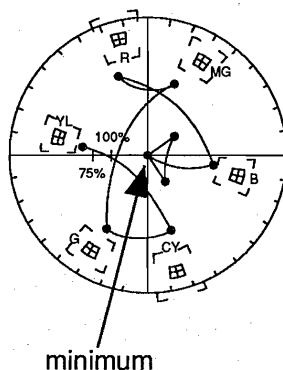
13. Chroma Emphasis Frequency Adjustment

Test Point	Adjust Point	Mode	Input
J703	T352 (3.58MHz)	Playback	Test Tape
Tape	M. EQ.	Specification	
FM8A	Vector Scope TV Monitor	Minimum	

Connections of M. EQ.



Figure



Reference Notes:

1. Connect equipment as shown in the above table.
2. Play back the test tape FM8A.
3. Adjust T352 so that the spot showing on the center of the Vector Scope becomes minimum.

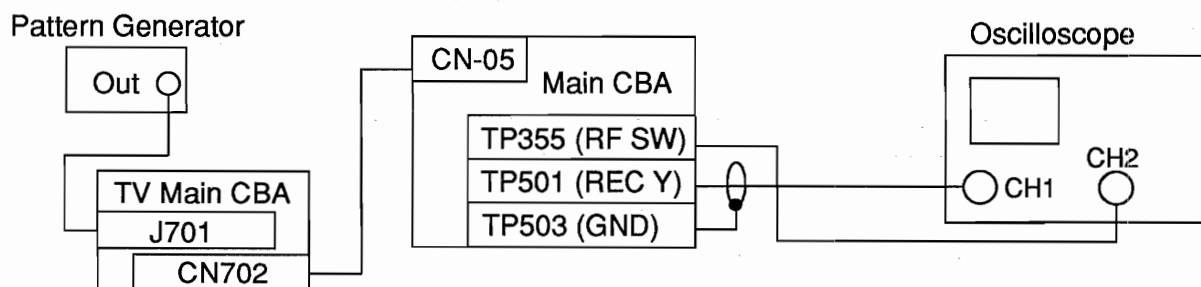
How to Set Up the Record Mode

1. Connect equipment in as the E-E mode shown in "How to Set Up the E-E Mode".
2. Insert a blank tape.

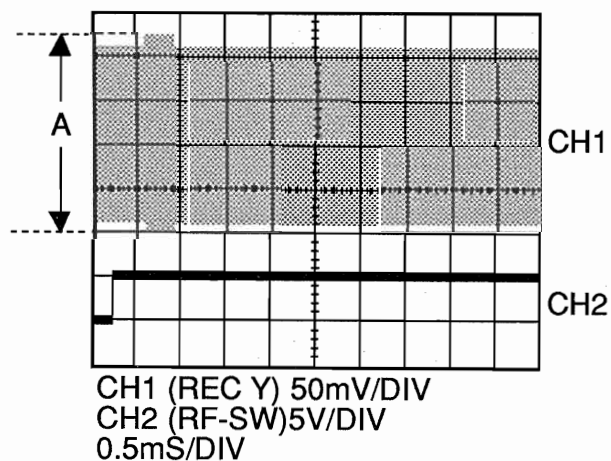
14.Record Luminance Current Adjustment

Test Point	Adjust Point	Mode	Input
TP501 (REC Y) TP503 (GND) TP355 (RF-SW)	VR501 (REC Y)	REC/SP	White 100%
Tape	M. EQ.	Specification	
Blank Tape	Pattern Generator Oscilloscope	A=225±5mV	

Connections of M. EQ.



Figure



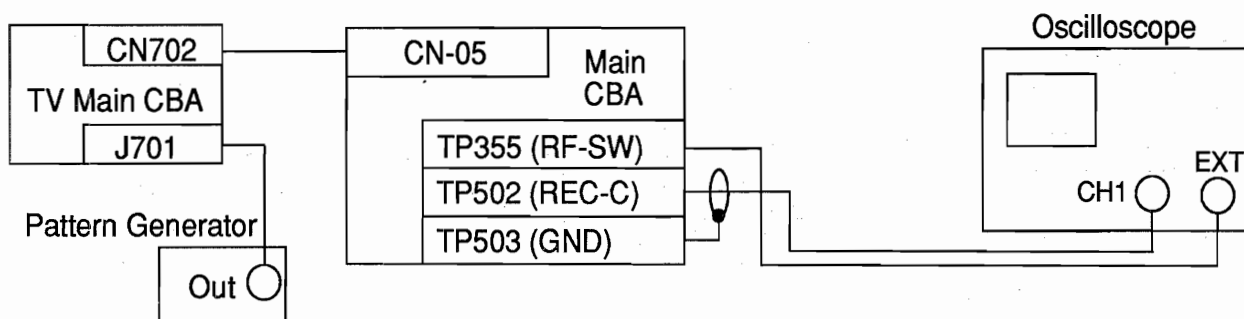
Reference notes:

1. Connect equipment as shown in the above figure.
2. Inject the White 100% signal to Video In (J701).
3. Adjust VR501 so that REC-Y voltage at V-sync becomes 225 ±5mV.

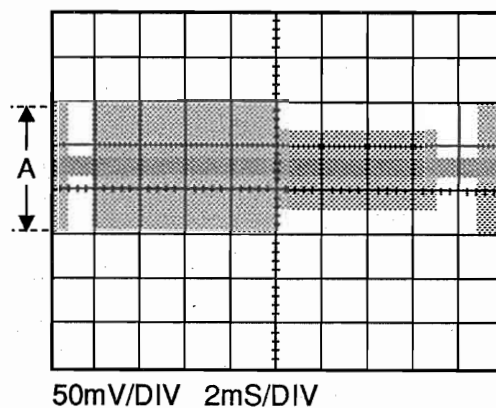
15.Record Chroma Current Adjustment

Test Point	Adjust Point	Mode	Input
TP355 (RF-SW) TP503 (GND) TP502 (REC-C)	VR502 (REC C)	REC/SP	Red Raster
Tape	M. EQ.	Specification	
Blank Tape	Pattern Generator Oscilloscope	$A=150\pm 5\text{mVp-p}$	

Connections of M. EQ.



Figure



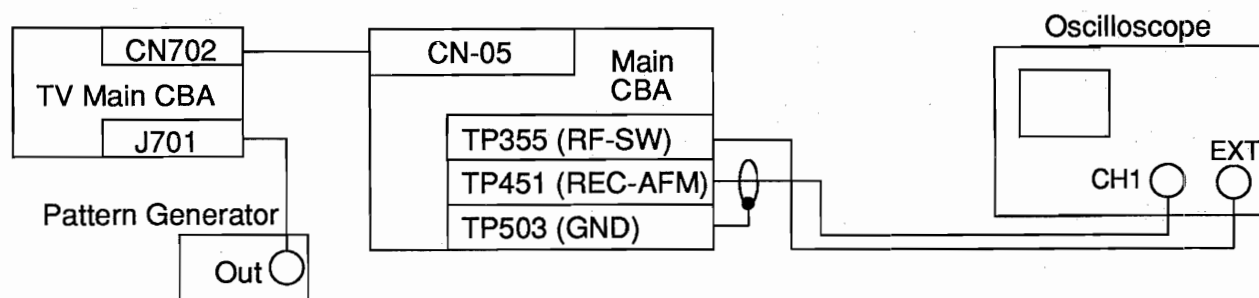
Reference notes:

1. Connect equipment as shown in the above table.
2. Input the Red Raster from Video In (J701).
3. Adjust VR502 so that the recording chroma current becomes $150\pm 5\text{mVp-p}$.

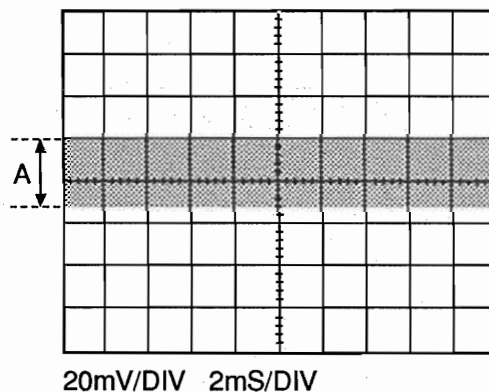
16.Record AFM Current Adjustment

Test Point	Adjust Point	Mode	Input
TP451 (REC AFM) TP503 (GND) TP355(RF-SW)	VR451 (REC AFM)	REC/SP	Red Raster
Tape	M. EQ.	Specification	
Blank Tape	Pattern Generator Oscilloscope	A=32±2mVp-p	

Connections of M. EQ.



Figure



Reference notes:

1. Connect equipment as shown in the above table.
2. Adjust VR451 so that the recording AFM current becomes 32±2mVp-p.

NOTES

SCHEMATIC DIAGRAMS/CBA'S AND TEST POINTS

Standard Notes

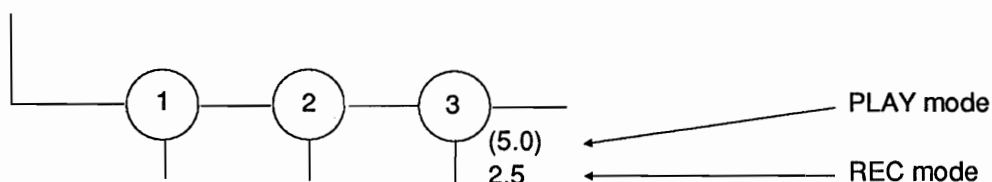
Warning

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by a $\triangle$ in the schematic diagram and the parts list.

Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Notes:

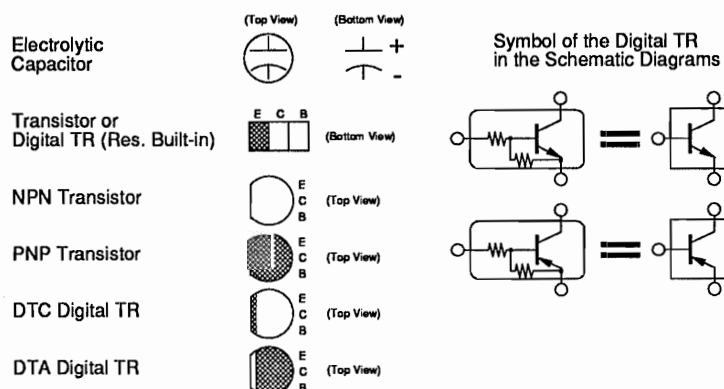
- ① Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
- ② All resistance values are indicated in ohms ($K=10^3$, $M=10^6$).
- ③ Resistor wattages are 1/5W or 1/6W unless otherwise specified.
- ④ All capacitance values are indicated in μF ($P=10^{-6}\mu F$).
- ⑤ All voltages are DC voltages unless otherwise specified.
- ⑥ Voltage Indications for PLAY and REC modes on the schematics are as shown below.



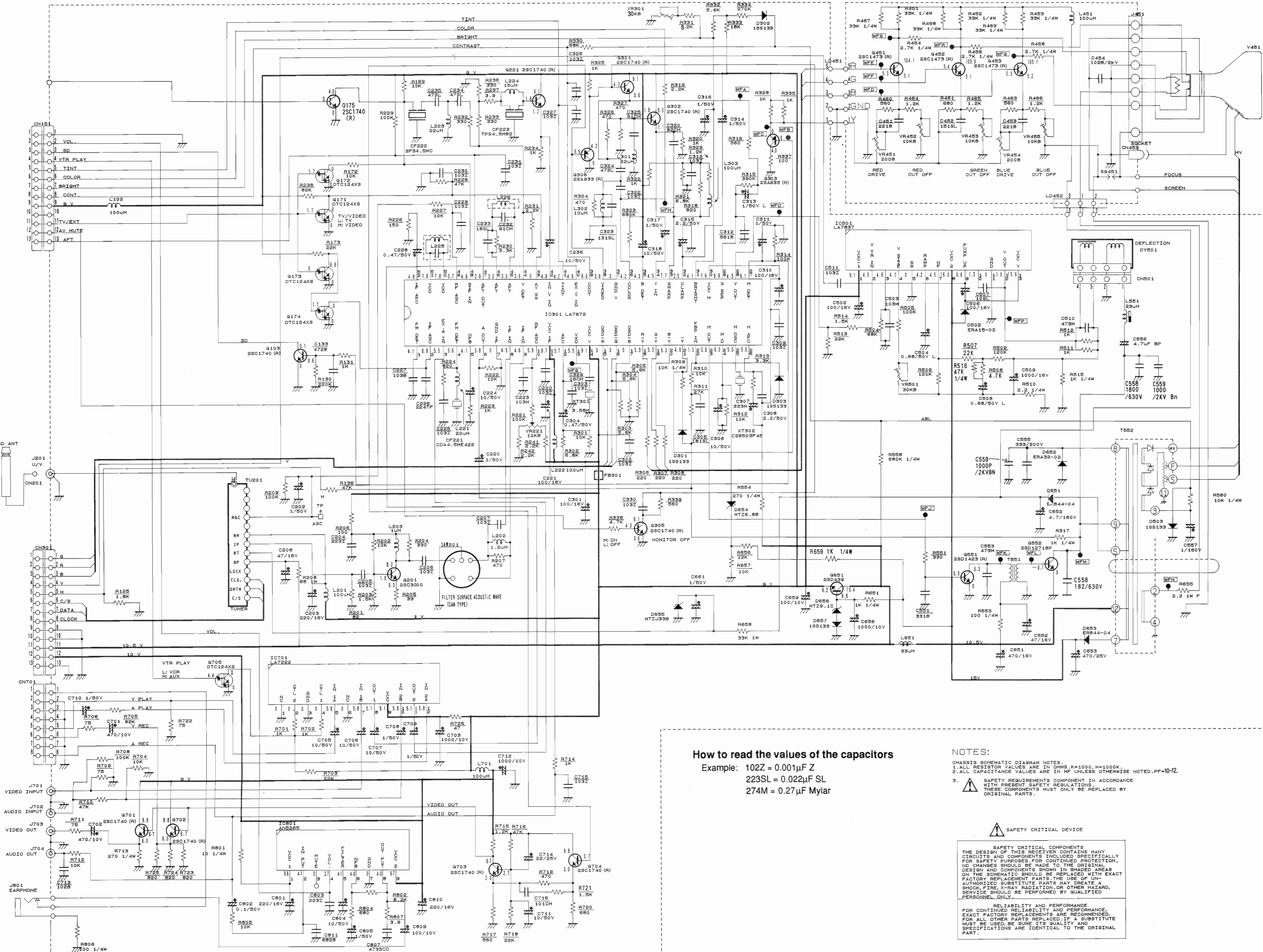
Capacitor Temperature Markings

Mark	Capacity change rate	Standard temperature	Temperature range
(B)	$\pm 10\%$	20°C	-25~+85°C
(F)	+30 -80%	20°C	-25~+85°C
(SR)	$\pm 15\%$	20°C	-25~+85°C
(Z)	+30 -80%	20°C	-10~+70°C

☆ Capacitors and transistors are noted with the following symbols.



TV Main/CRT



How to read the values of the capacitors

Example: 102Z = 0.001 μ F Z
223SL = 0.022 μ F SL
274M = 0.27 μ F Myla

NOTES:

CHASSIS SCHEMATIC DIAGRAM NOTES.

1. ALL RESISTOR VALUES ARE IN OHMS, K=1000, M=1000K.
2. ALL CAPACITANCE VALUES ARE IN MF UNLESS OTHERWISE NOTED. PF=10-12.
3.  SAFETY REQUIREMENTS COMPONENT IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.



SAFETY CRITICAL DEVICE

SAFETY CRITICAL COMPONENTS

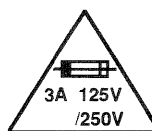
THE DESIGN OF THE RECEIVER CONTAINS MANY CIRCUITS AND COMPONENTS INCLUDED SPECIFICALLY FOR SAFETY PURPOSES. FOR CONTINUED PROTECTION, NO CHANGES SHOULD BE MADE TO THE ORIGINAL DESIGN AND COMPONENTS. IF A COMPONENT, AS SHOWN IN THE SCHEMATIC, SHOULD BE REPLACED WITH EXACT FACTORY REPLACEMENT PARTS. THE USE OF UNAUTHORIZED SUBSTITUTE PARTS MAY CREATE A SHOCK, FIRE, X-RAY RADIATION, OR OTHER HAZARD, AND SHOULD BE PERFORMED BY QUALIFIED PERSONNEL ONLY.

RELIABILITY AND PERFORMANCE
FOR CONTINUED RELIABILITY AND PERFORMANCE,
EXACT FACTORY REPLACEMENTS ARE RECOMMENDED.
FOR ALL OTHER PARTS REPLACED, IF A SUBSTITUTE
MUST BE USED, BE SURE ITS QUALITY AND
SPECIFICATIONS ARE IDENTICAL TO THE ORIGINAL
PART.

DC-DC/Control/Power Supply/Connector/Switch

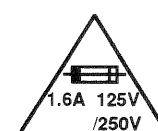
How to read the values of the capacitors

Example: $102Z = 0.001\mu F Z$

$$223\text{SL} = 0.022\mu\text{F SL}$$


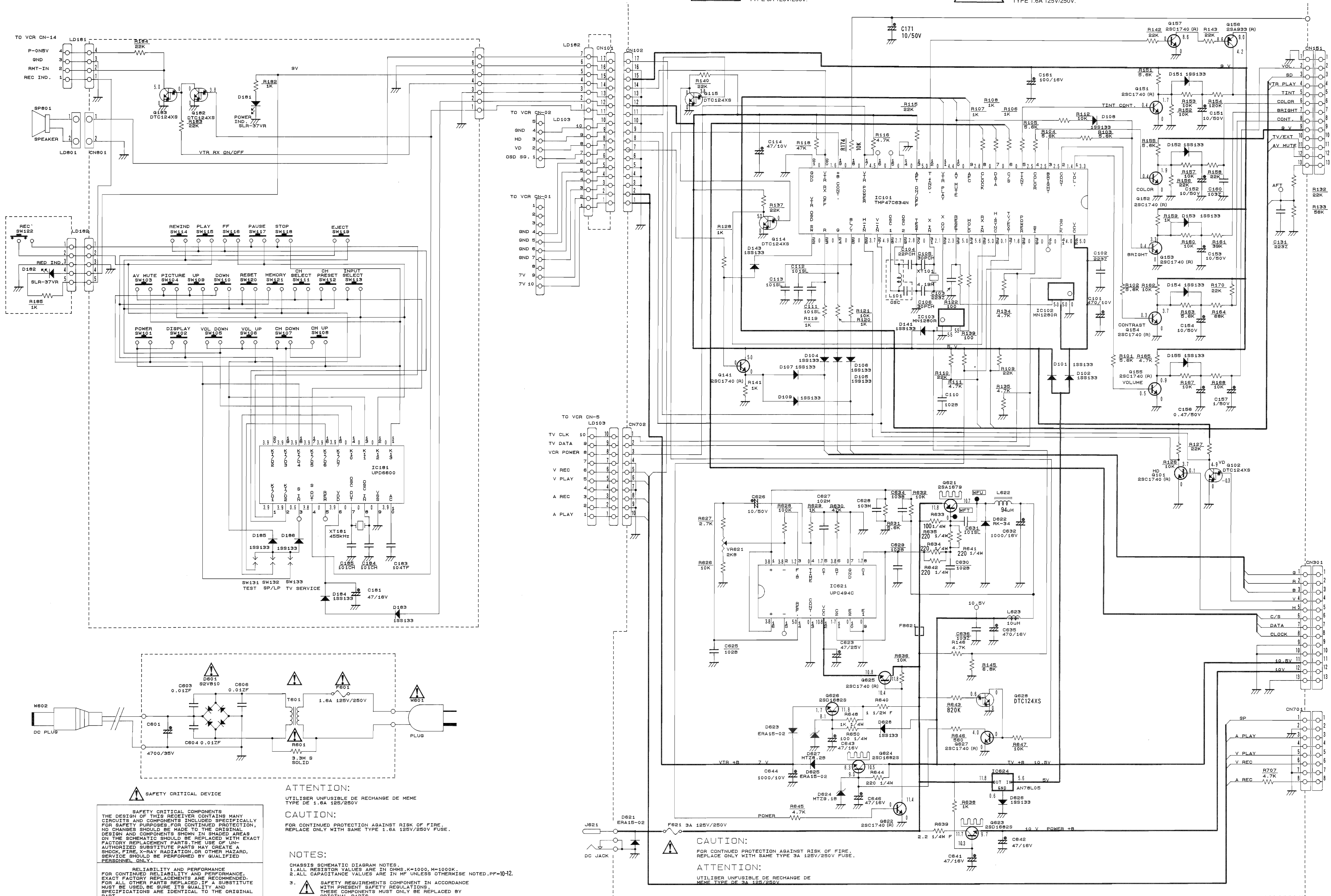
CAUTION:

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MEME
TYPE 3A 125V/250V.

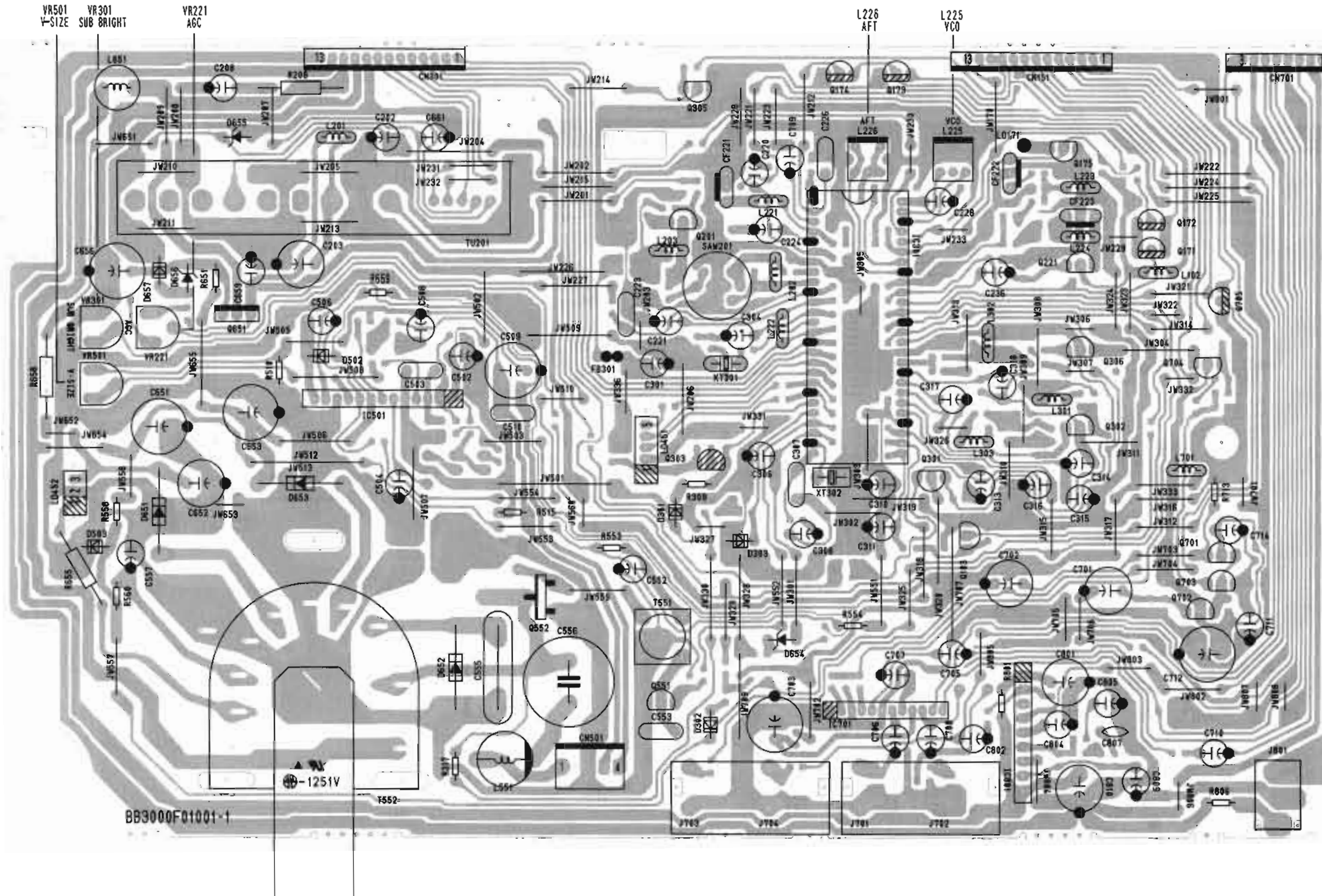


CAUTION:

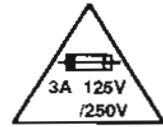
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 1.6A 125V/250V FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEMO
TYPE 1.6A 125V/250V



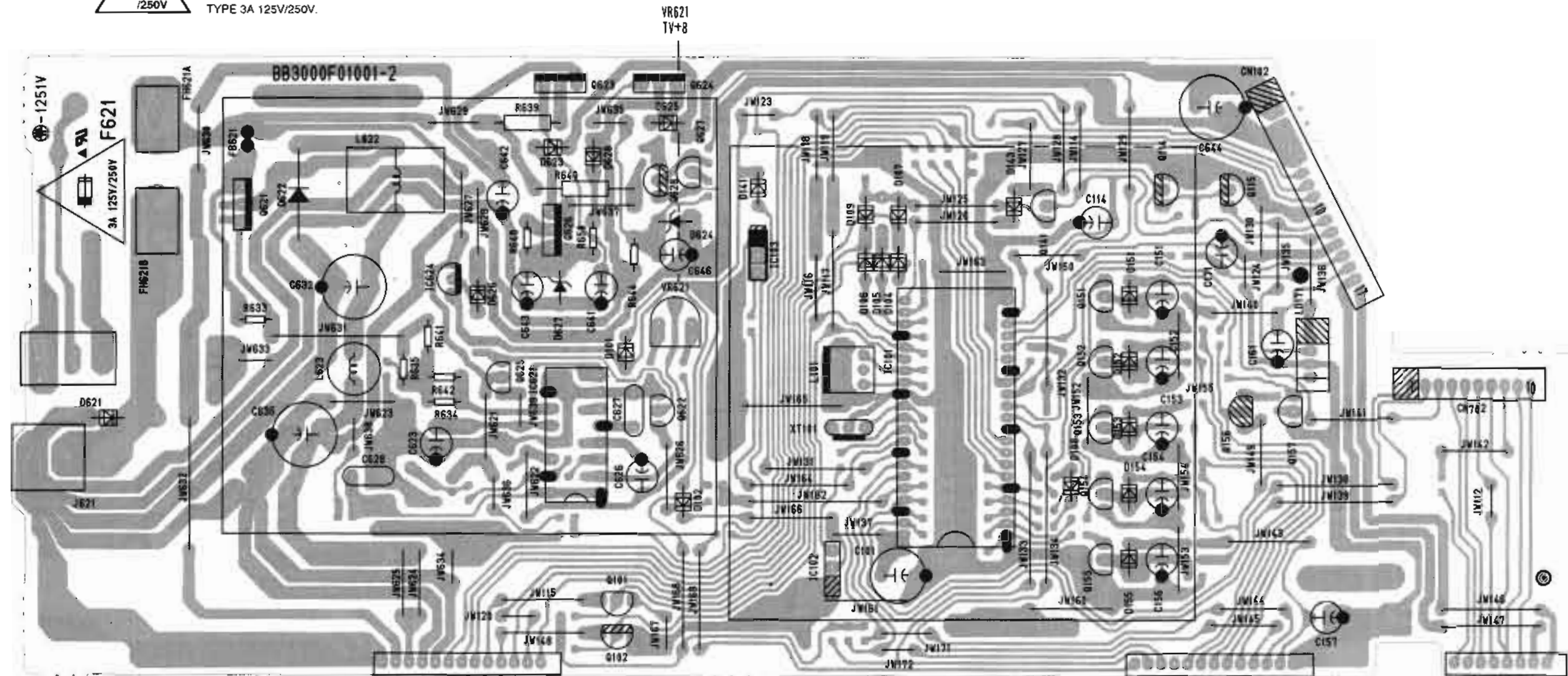
TV Main Top View



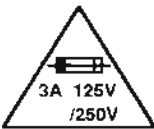
DC-DC Top View



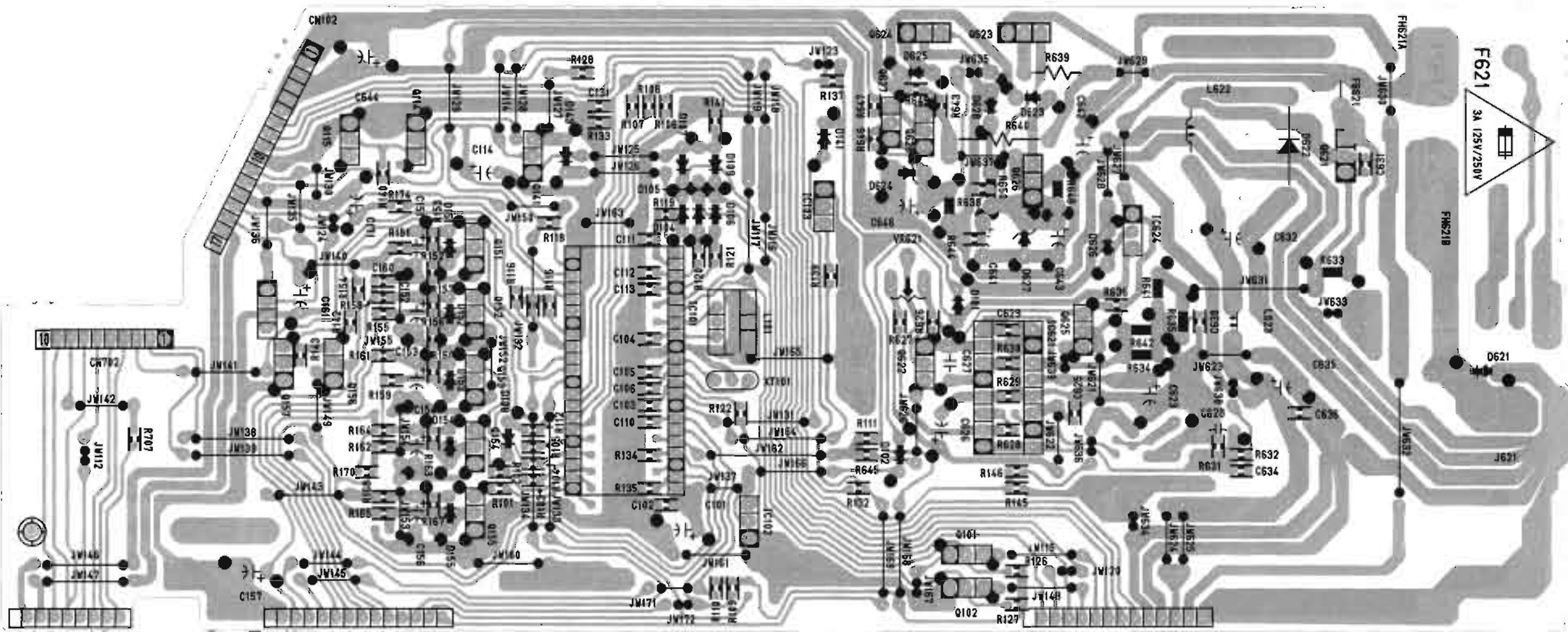
CAUTION:
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCENDIE N'UTILISER QUE DES FUSIBLE DE MEME
TYPE 3A 125V/250V.

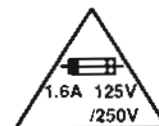


DC-DC Bottom View



CAUTION:
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE 3A 125V/250V FUSE
ATTENTION . POUR UNE PROTECTION CONTINUE LES RISQUES
D'INCEIE N'UTILISER QUE DES FUSIBLE DE MEMO
TYPE 3A 125V/250V





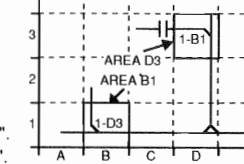
12514 91
SW122
10183
5
102

SW122 5811 LD153
0182 5 11 9

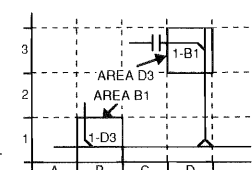
↑↑ DISTINCTION ARE.
 ↑ LINE NUMBER
 (1 TO 3 DIGIT)

1. "1-D3" MEANS THAT LINE NUMBER "1" GOES TO AREA "D3"

2. "1-B1" MEANS THAT LINE NUMBER "1" GOES TO AREA "B1"

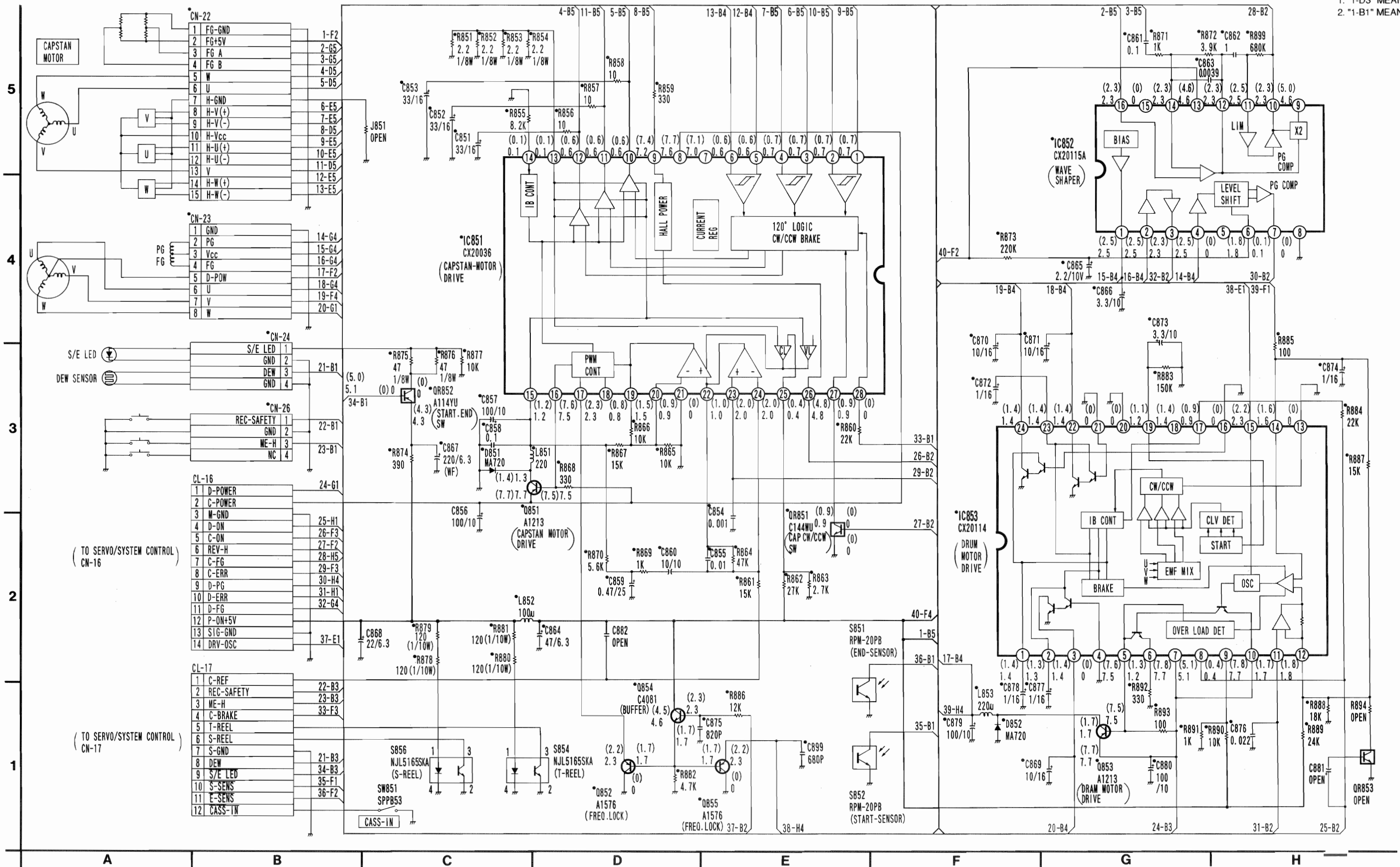


2. "1-B1" MEANS THAT LINE NUMBER "1" GOES TO AREA "B1".

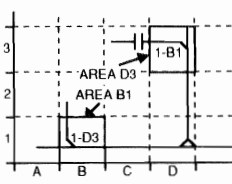


— 1352
3.58118

VCR Driver

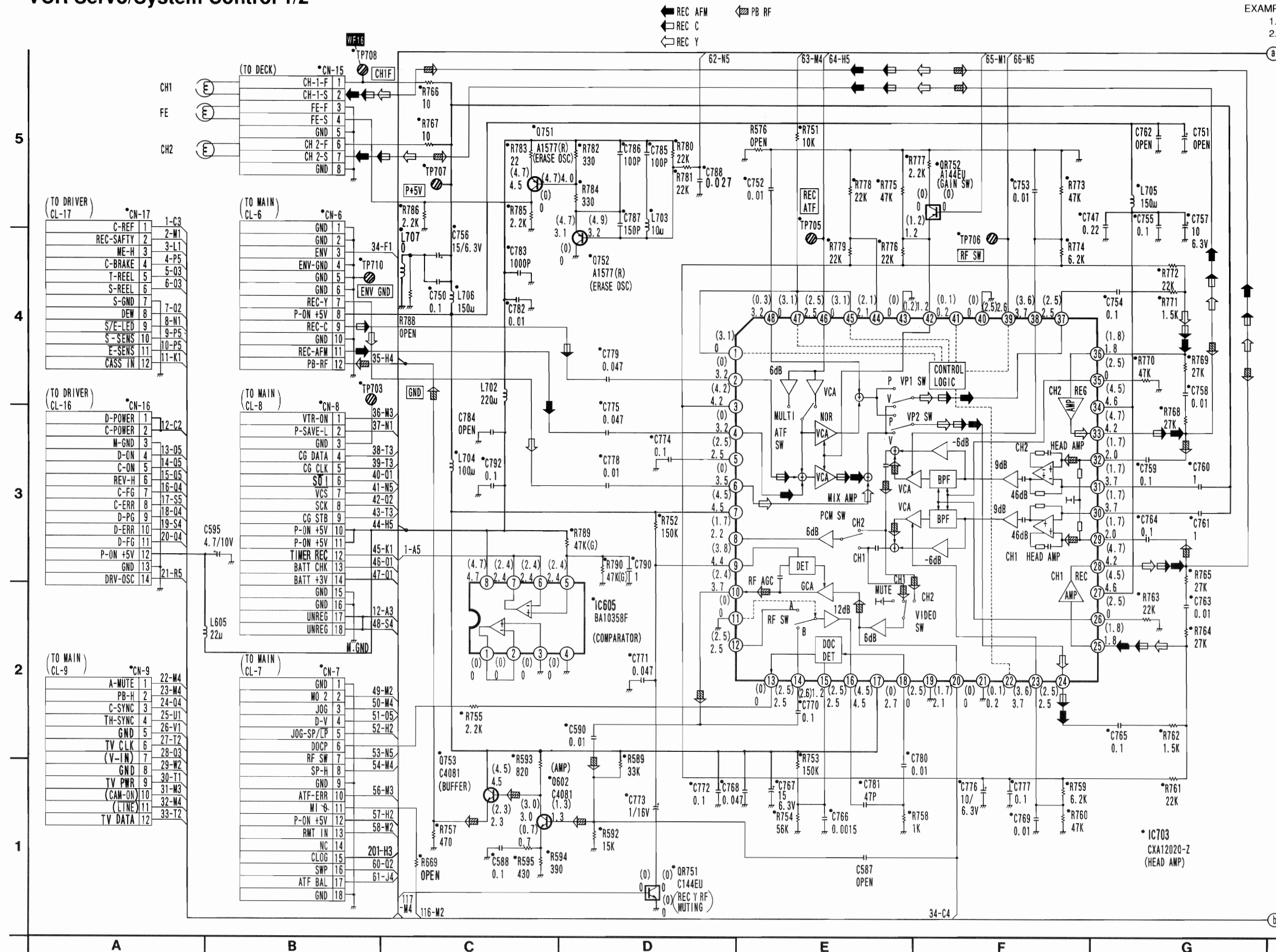


NOTE : HOW TO READ CONVERGED LINE
DISTINCTION AREA
LINE NUMBER
(1 TO 3 DIGIT)
EXAMPLE :
1. "1-D3" MEANS THAT LINE NUMBER "1" GOES TO AREA "D3".
2. "1-B1" MEANS THAT LINE NUMBER "1" GOES TO AREA "B1".



NOTE:THE GRAY PATTERN IS ON YOUR SIDE.
THE GREEN PATTEN IS ON THE REVERSE SIDE

VCR Servo/System Control 1/2

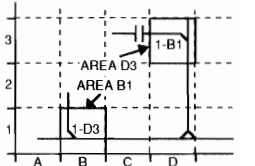


NOTE : HOW TO READ CONVERGED LINE

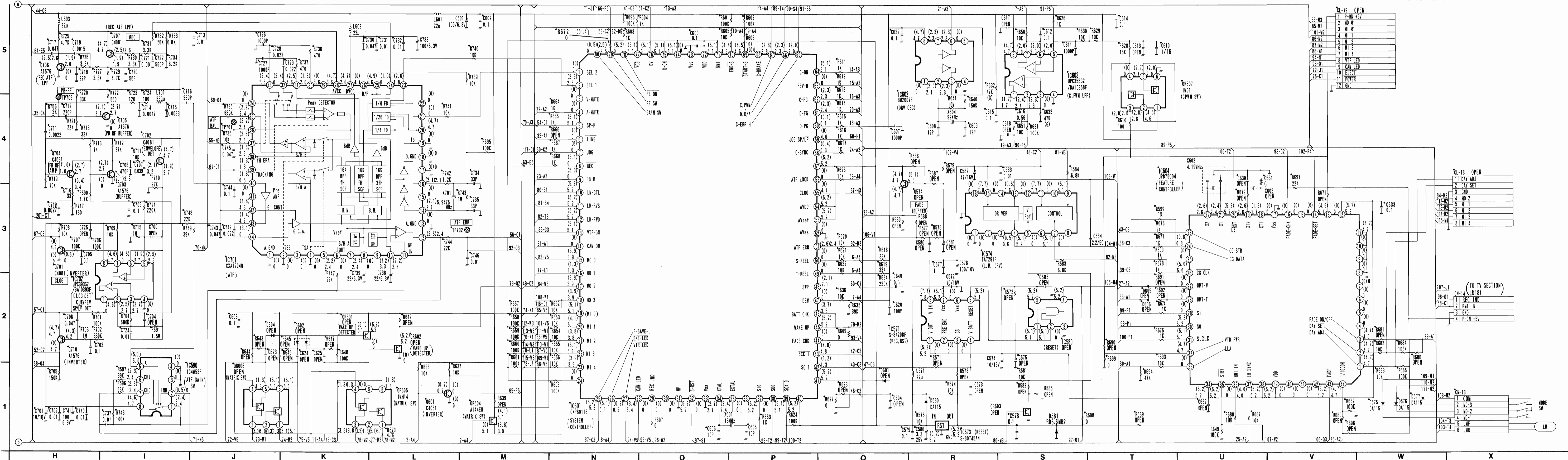
1-D3
 DISTINCTION AREA
 LINE NUMBER
 (1 TO 3 DIGIT)

EXAMPLE :

- "1-D3" MEANS THAT LINE NUMBER "1" GOES TO AREA "D3".
- "1-B1" MEANS THAT LINE NUMBER "1" GOES TO AREA "B1".



VCR Servo/System Control 2/2



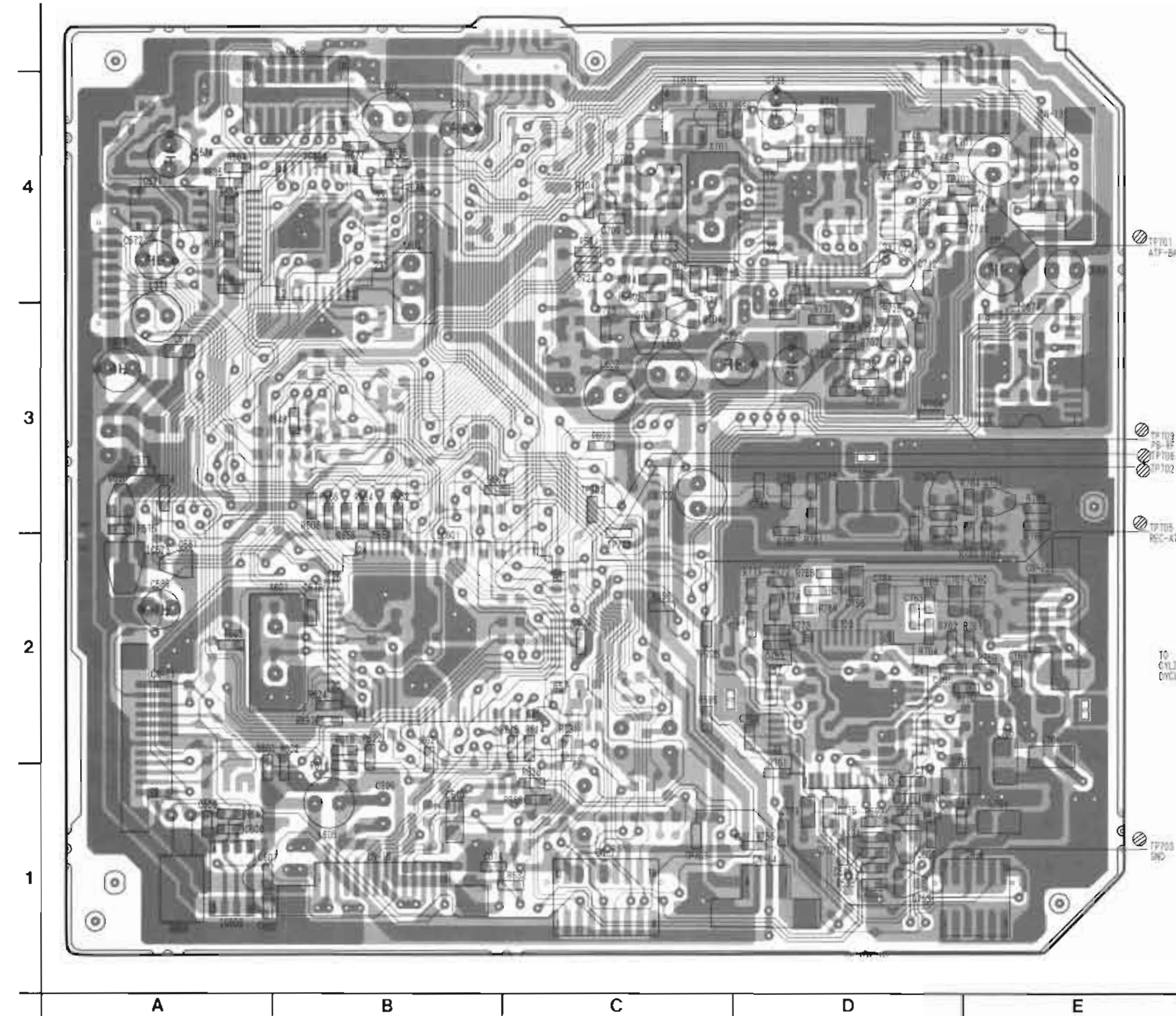
NOTE: HOW TO READ CONVERGED LINE

1. "D3" MEANS THAT LINE NUMBER "1" GOES TO AREA "D3".

2. "B1" MEANS THAT LINE NUMBER "1" GOES TO AREA "B1".

VCR Servo/System Control Top View

NOTE THE GRAY PATTERN IS ON YOUR SIDE
THE GREEN PATTEN IS ON THE REVERSE SIDE



VCR Servo/System Control Bottom View

TP701
ATF-BAL

TP702
PS-LS
TP706 RF SW
TP702 ATF ERR

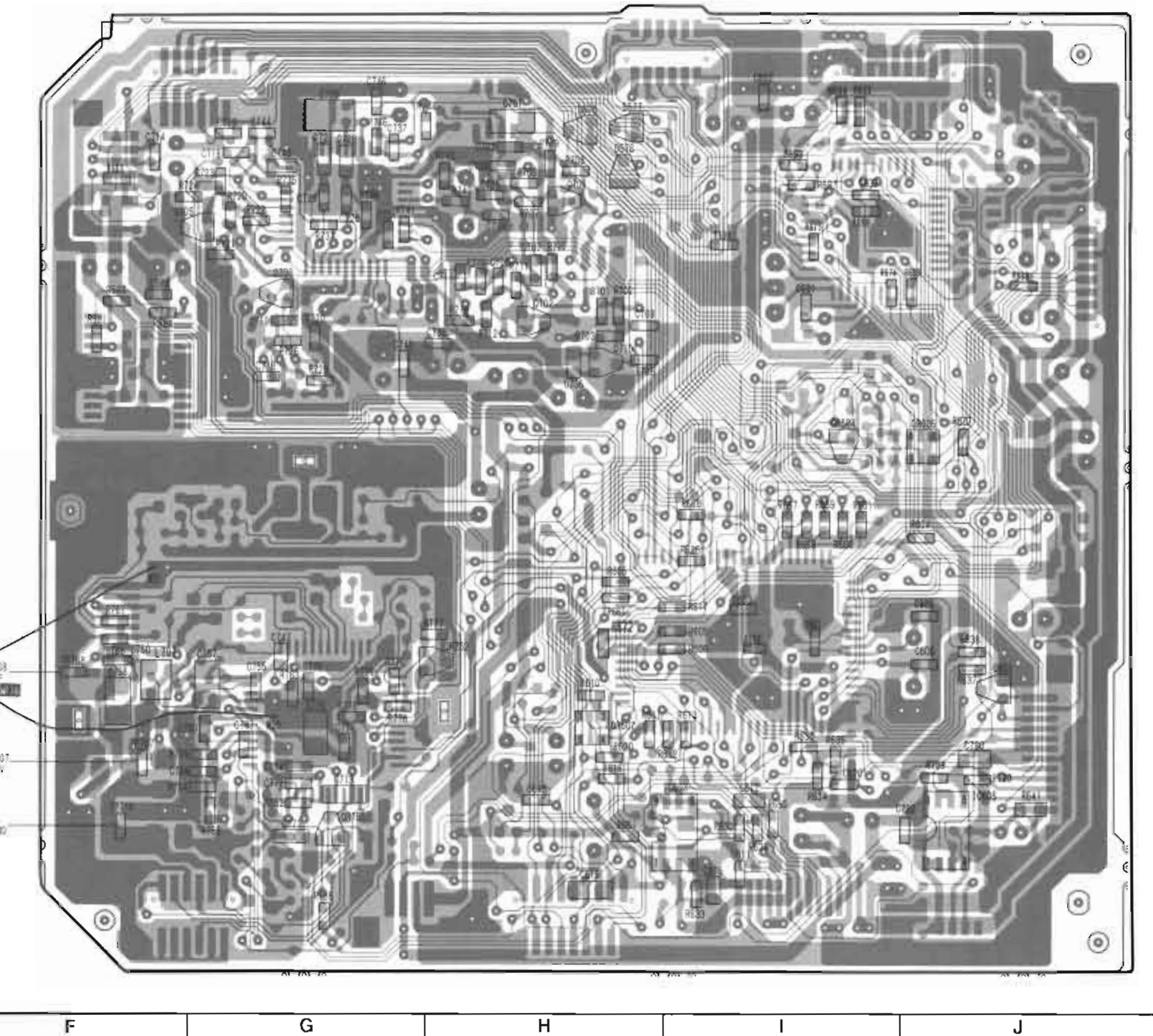
TP705
REC-ATF

TO
CYLINDER
CNC/IF

TP707
P-5V

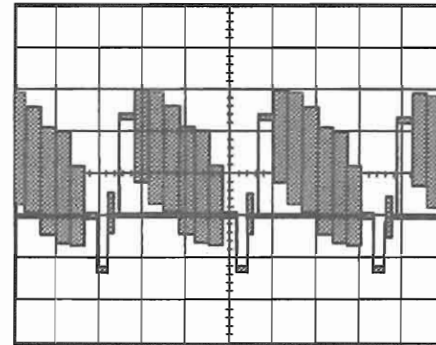
TP710
ENV SHD

TP703
SHD

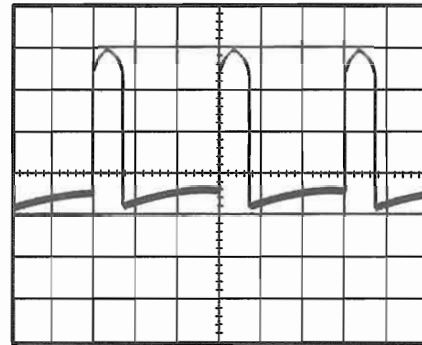


WAVEFORMS

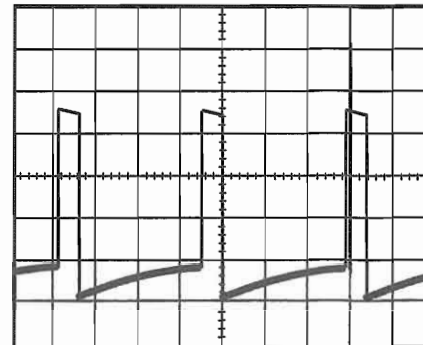
WF A - WF S = Waveform Check Points



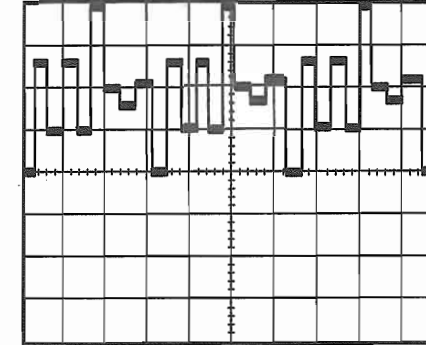
WFA
1 DIV=20μs 1 DIV=0.2V



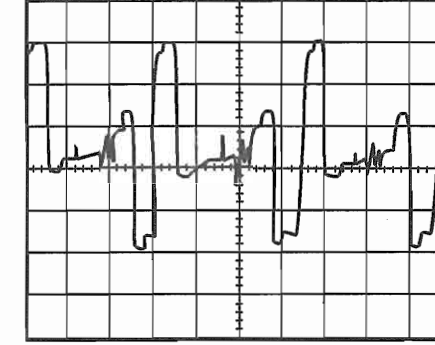
WFB
1 DIV=20μs 1 DIV=2V



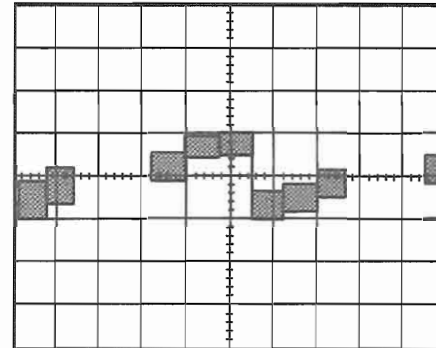
WFC
1 DIV=20μs 1 DIV=1V



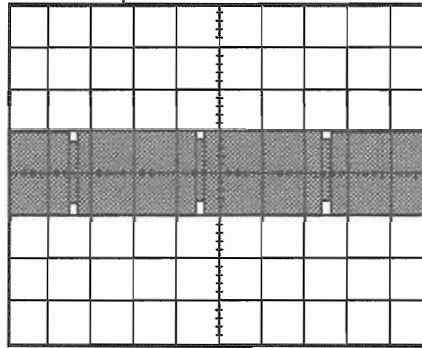
WFD
1 DIV=20μs 1 DIV=0.5V



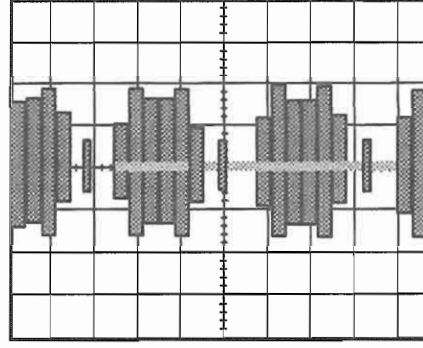
WFE
1 DIV=20μs 1 DIV=0.5V



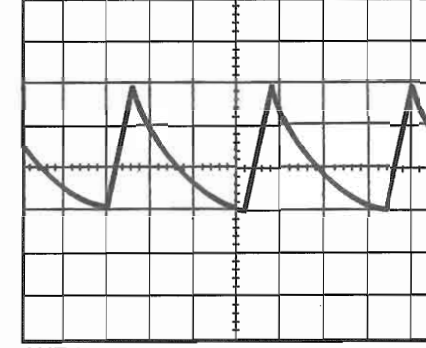
WFF
1 DIV=20μs 1 DIV=0.5V



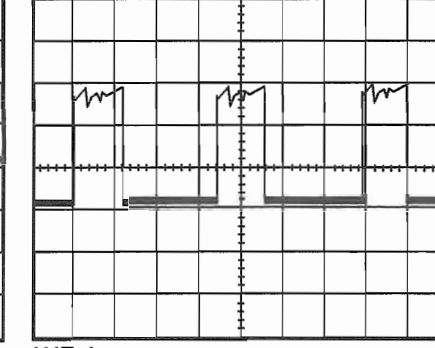
WFG
1 DIV=20μs 1 DIV=5mV



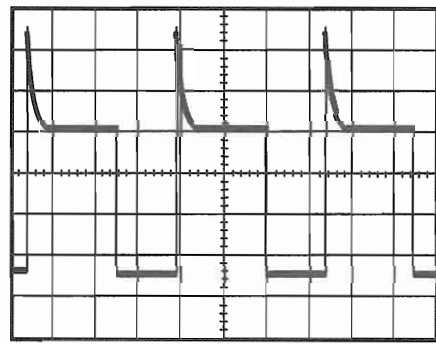
WFH
1 DIV=20μs 1 DIV=50mV



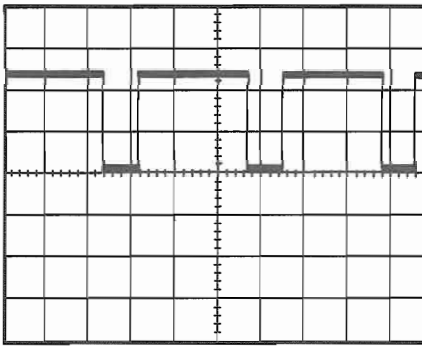
WFI
1 DIV=5μs 1 DIV=2V



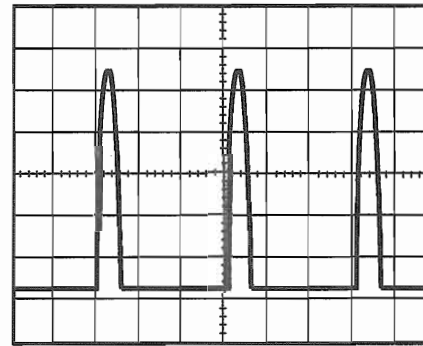
WFJ
1 DIV=20μs 1 DIV=0.5V



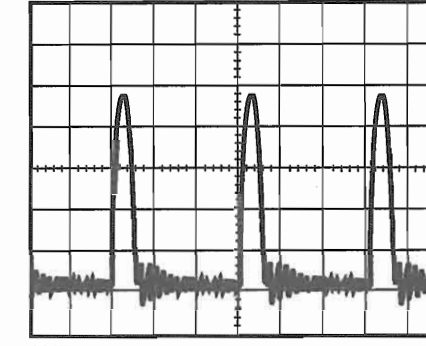
WFK
1 DIV=20μs 1 DIV=2V



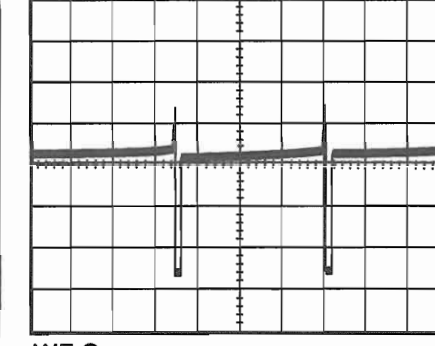
WFL
1 DIV=20μs 1 DIV=1V



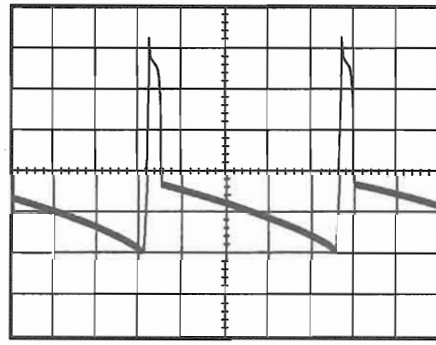
WFM
1 DIV=20μs 1 DIV=20V



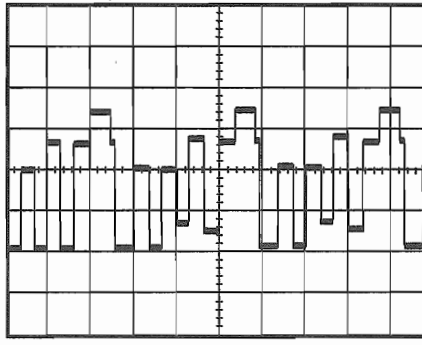
WFN
1 DIV=20μs 1 DIV=5V



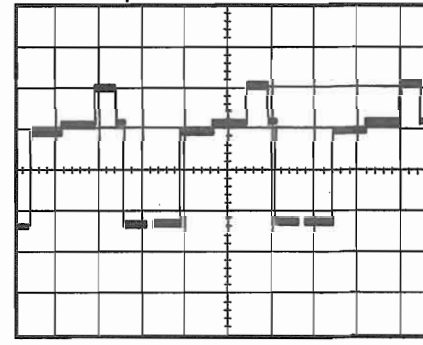
WFO
1 DIV=5ms 1 DIV=2V



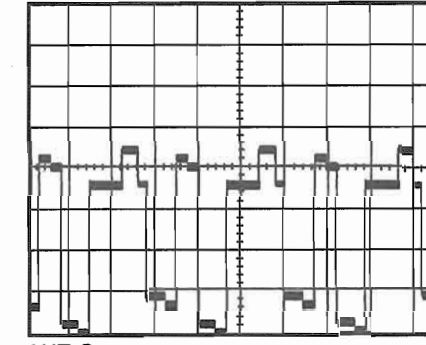
WFP
1 DIV=5ms 1 DIV=5V



WFQ
1 DIV=20μs 1 DIV=10V



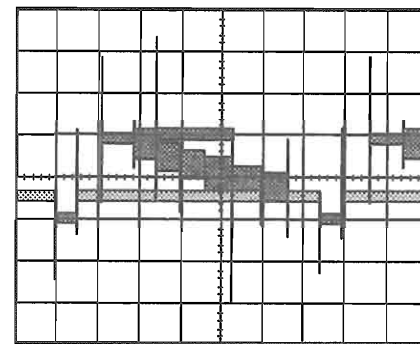
WFR
1 DIV=20μs 1 DIV=10V



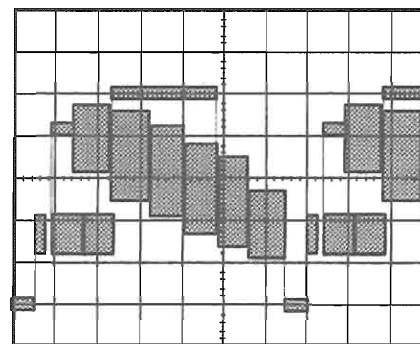
WFS
1 DIV=20μs 1 DIV=10V

WAVEFORM NOTES:
Input : NTSC color bar signal
Brightness : Center
Contrast : Center
Color : Center
Tint : Center

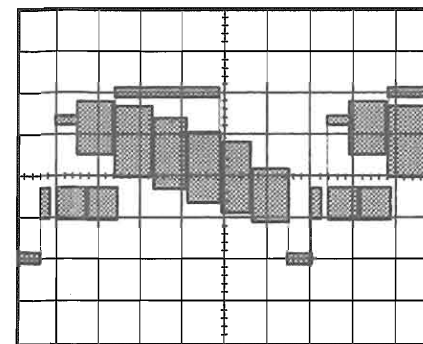
VCR Section



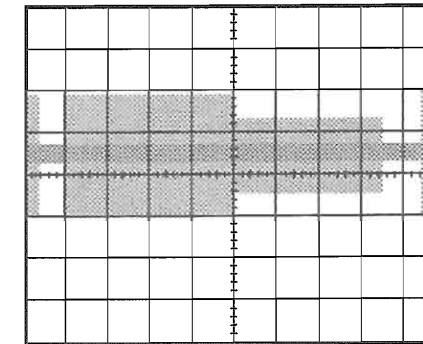
WF1 100mV/DIV 10uS/DIV



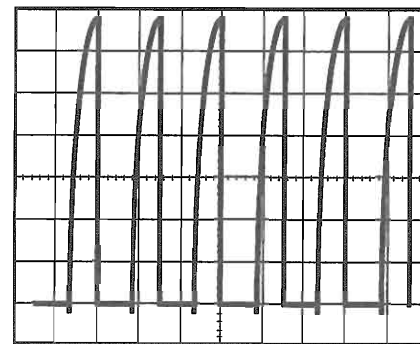
WF5 100mV/DIV 10uS/DIV



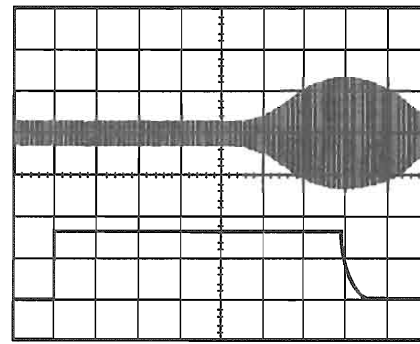
WF10 0.5V/DIV 10uS/DIV



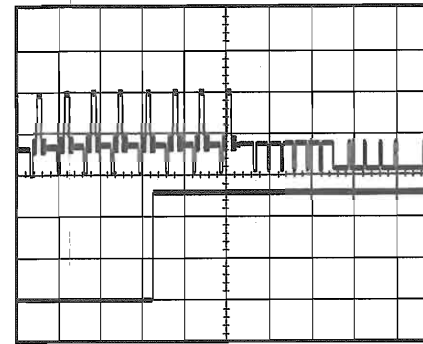
WF15 50mV/DIV 2mS/DIV



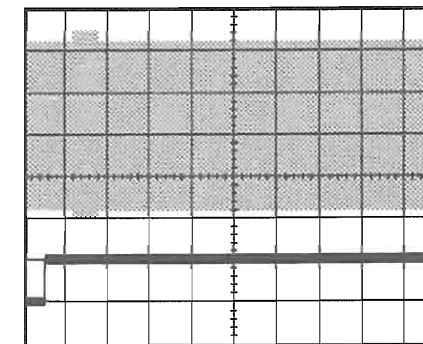
WF2 1V/DIV 1uS/DIV



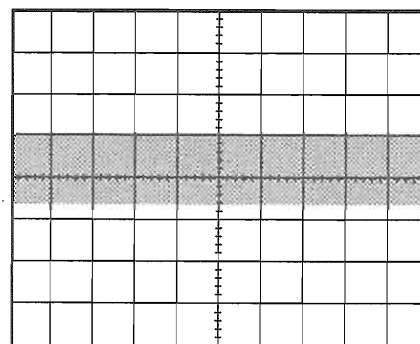
UPPER:WF6 200mV/DIV
LOWER:WF7 1V/DIV
1uS/DIV



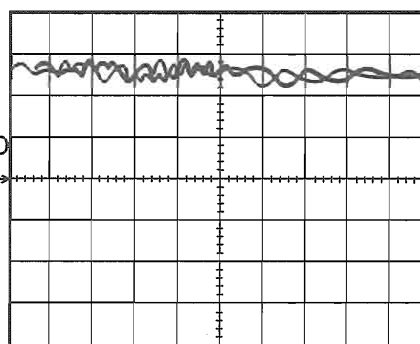
UPPER:WF11 500mV/DIV
LOWER:WF12 0.2V/DIV
2uS/DIV



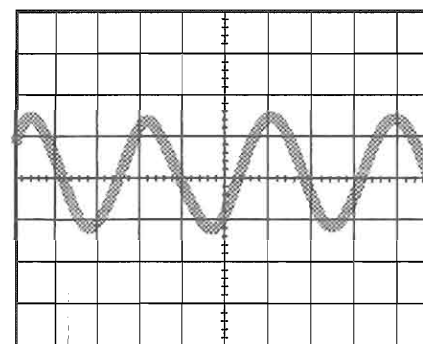
UPPER:WF16 50mV/DIV
LOWER:WF17 5V/DIV
0.5mS/DIV



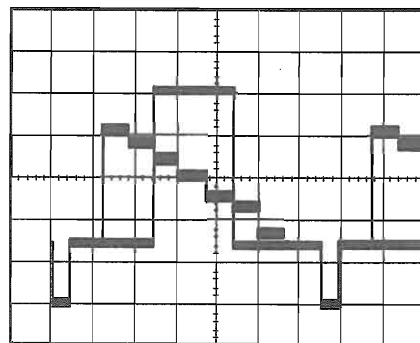
WF3 20mV/DIV 2mS/DIV



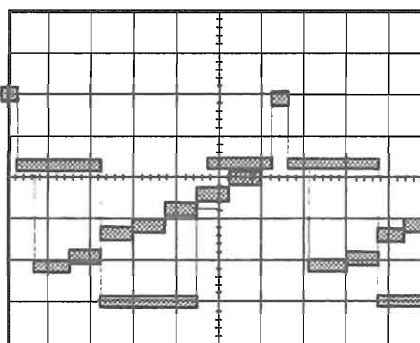
WF8 1V/DIV 5mS/DIV



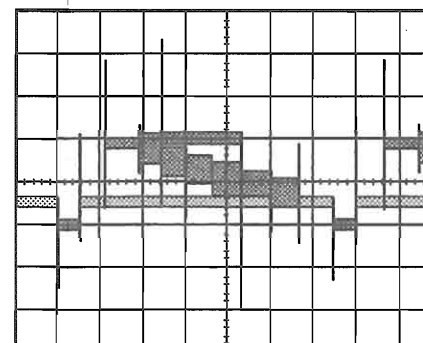
WF13 50mV/DIV 1mS/DIV



WF4 100mV/DIV 10uS/DIV



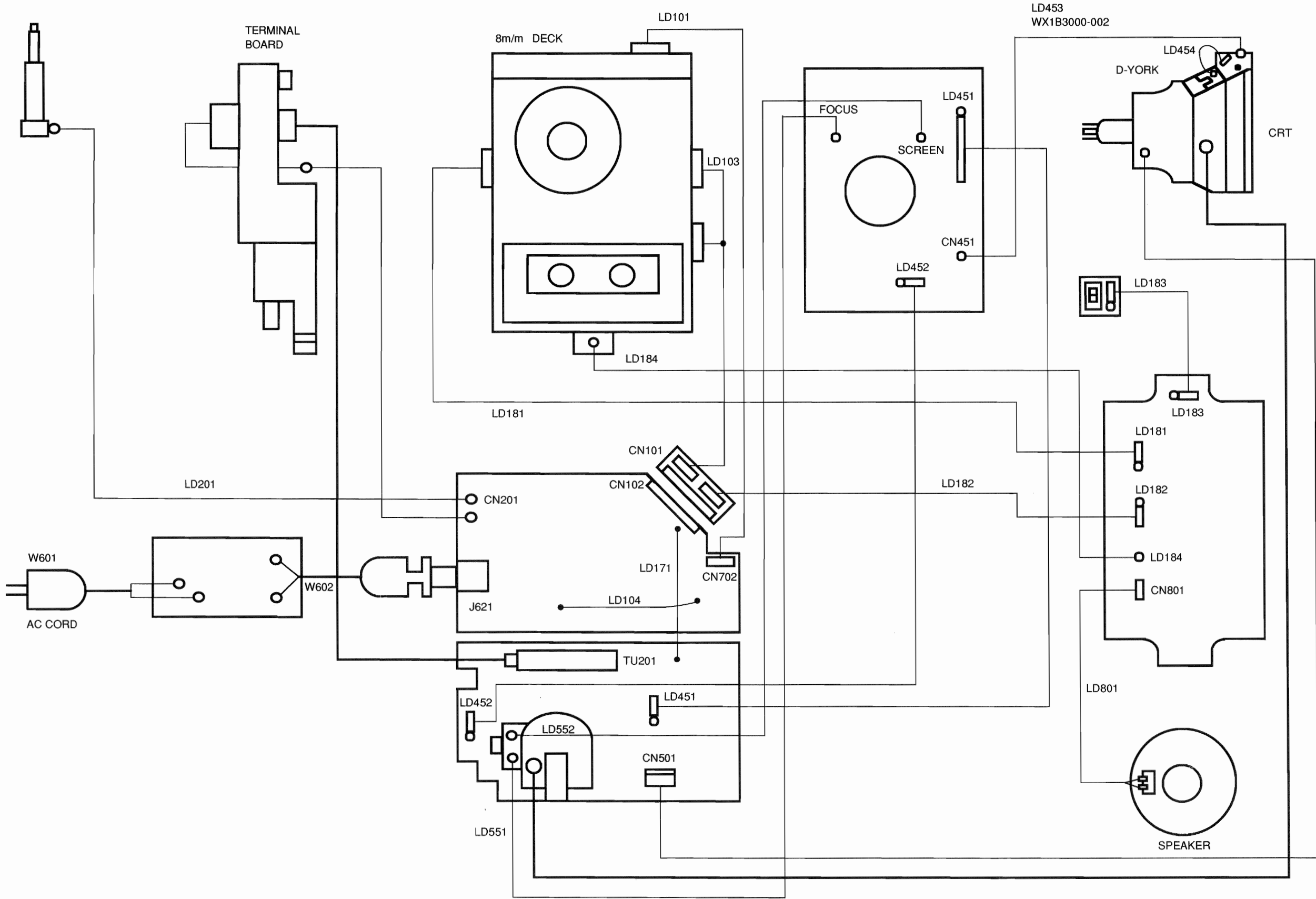
WF9 100mV/DIV 10uS/DIV



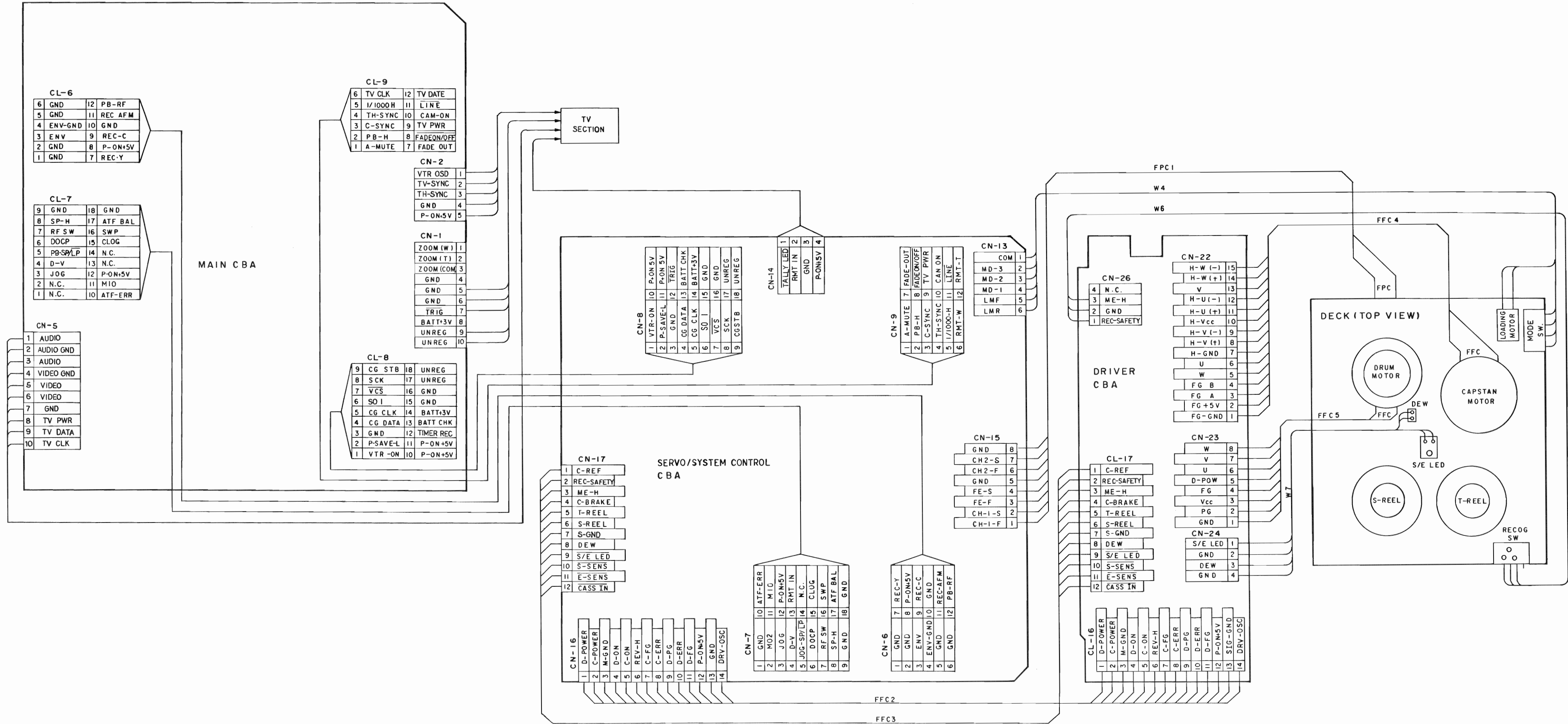
WF14 100mV/DIV 10uS/DIV

WIRING DIAGRAMS

TV Section



VCR Section



SYSTEM CONTROL TIMING CHART

Chart 1

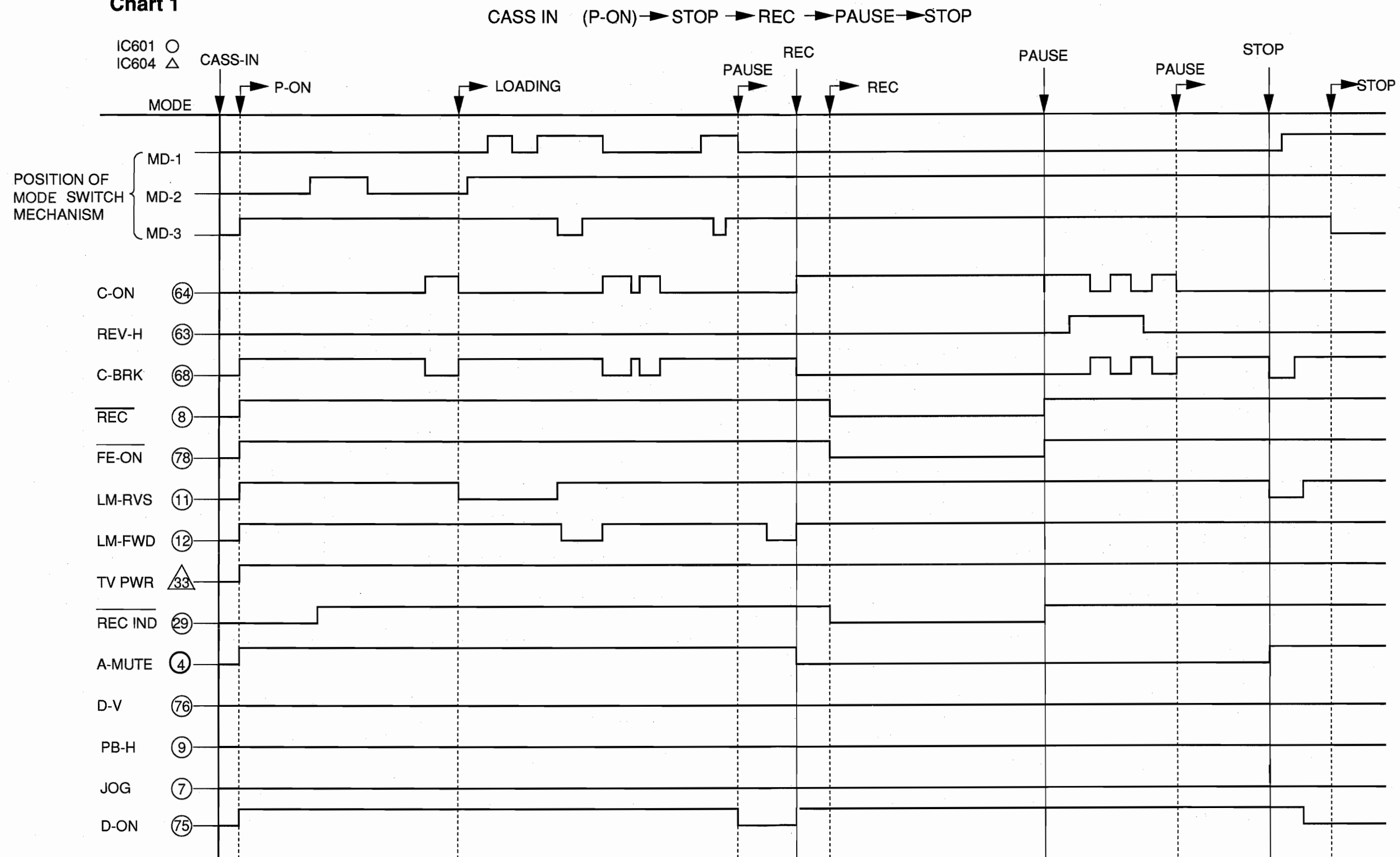
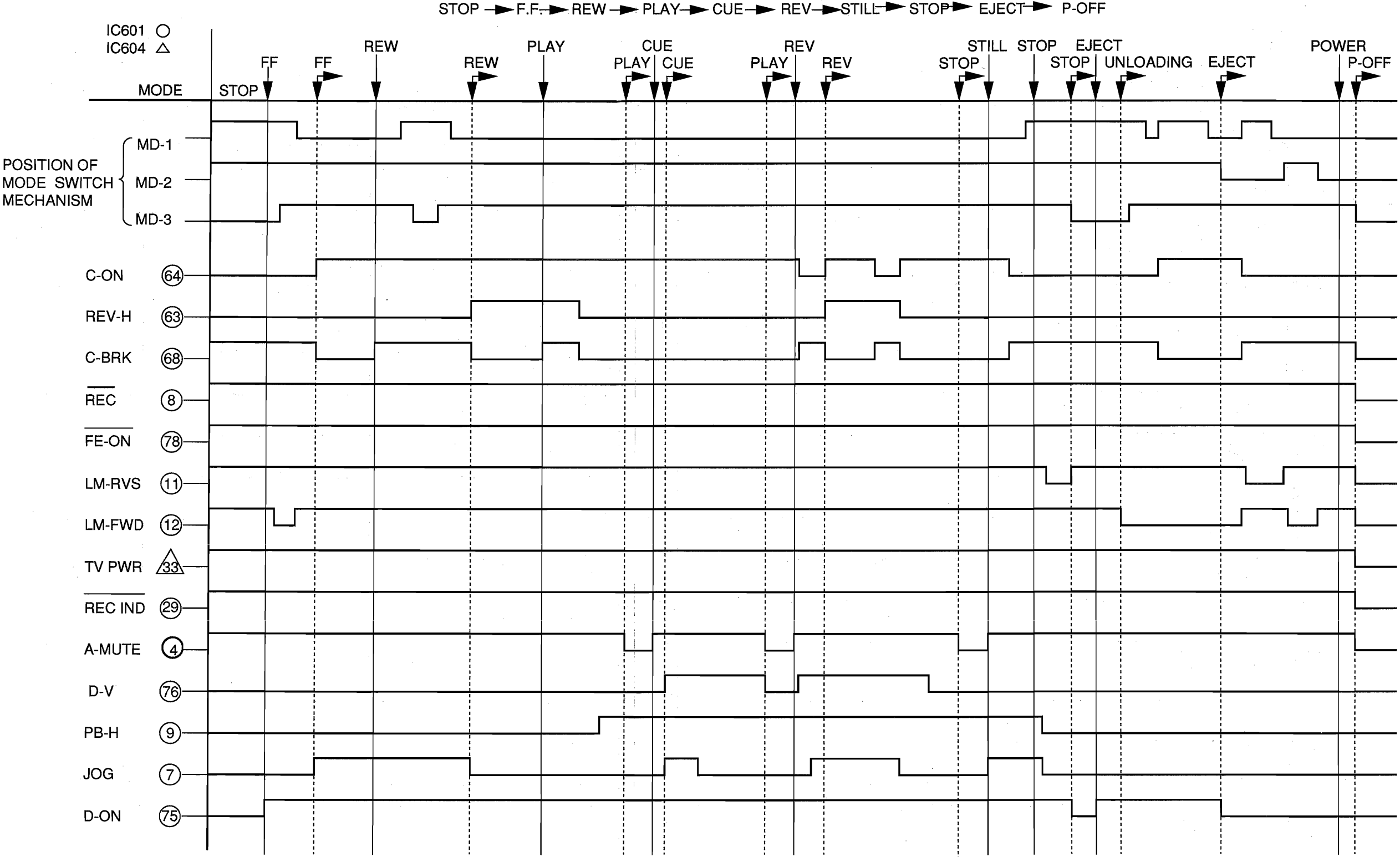


Chart 2



ELECTRICAL PARTS LIST

TV SECTION

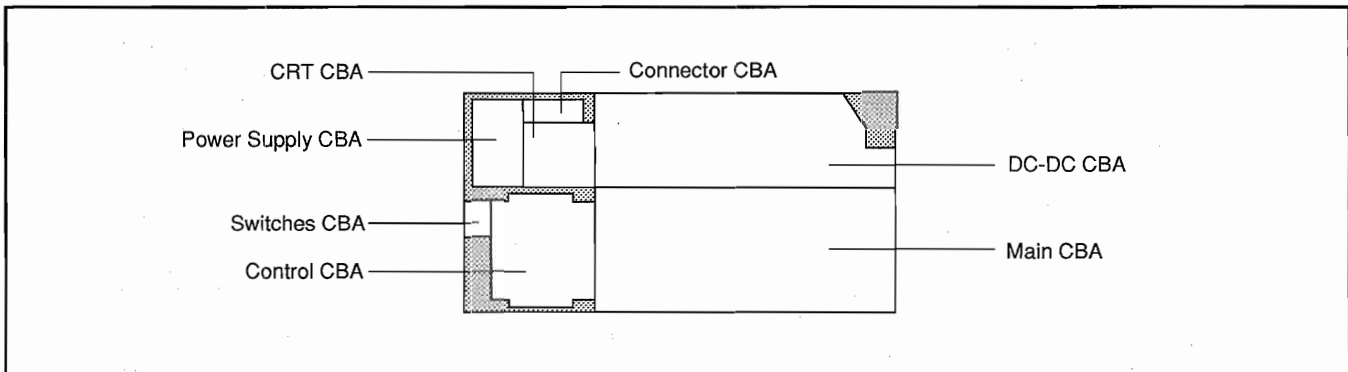
PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice of this service manual. Don't degrade the safety of the product through improper servicing.

NOTE: Parts that have no part numbers assigned (-----) are not available.

Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%	J.....±5%	Z.....+80/-20%
D.....±0.5%	K.....±10%	X.....+40/-20%
F.....±1%	M.....±20%	P.....+100%
G.....±2%	N.....±30%	

MMA-82 CBA



Main CBA

Ref. No.		Description	Part No.
		CBA Main Consists of the following:	-----
Capacitors			
C133		Chip Ceramic 0.0047μF YB 50V	CHE1JKB0B472
C202		Electrolytic 1μF 50V	126F105S
C203		Electrolytic 220μF 16V	126C227S
C204		Chip Ceramic 0.022μF FZ 50V	CHE1JZB0F223
C205		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C206		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C207		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C208		Electrolytic 47μF 16V	126C476S
C220		Electrolytic 1μF 50V	126F105S
C221		Electrolytic 100μF 16V	126C107S
C222		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C223		*Mylar 0.01μF J or Mylar 0.01μF J	2254103S 1254103S
C224		Electrolytic 10μF 50V	126F106S
C225		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C226		TF 0.22μF J	125U224
C227		Chip Ceramic 0.01μF YB 50V	CHE1JZB0B103
C228		Electrolytic 0.47μF 50V	126F474S
C229		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C230		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103

*Mylar is a registered trademark of E.I. Du Pont de Nemours and Company.

Ref. No.	△	Description	Part No.
C231		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C232		Chip Ceramic 91pF CH 50V	CHE1JJBCH910
C233		Chip Ceramic 18pF J SL 50V	CHE1JJBSL180
C234		Chip Ceramic 47pF J SL 50V	CHE1JJBSL470
C235		Chip Ceramic 47pF J SL 50V	CHE1JJBSL470
C236		Electrolytic 10μF 50V	126F106S
C301		Electrolytic 100μF16 V	126C107S
C302		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C303		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C304		Electrolytic 0.47μF 50V	126F474S
C305		Chip Ceramic 220 pF YB 50V	CHE1JKB0B221
C306		Electrolytic 10μF 50V	126F106S
C307		Mylar 0.033μF J or Mylar 0.033μF J	2254333S 1254333S
C308		Electrolytic 2.2μF 50V	126F225S
C309		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C310		Electrolytic 100μF16 V	126C107S
C311		Electrolytic 1μF 50V	126F105S
C312		Chip Ceramic 560 pF YB 50V	CHE1JKB0B561
C313		Electrolytic 1μF 50V L or Electrolytic 1μF 50V L	124S105S CE1JMAULL010
C314		Electrolytic 1μF 50V	126F105S
C315		Electrolytic 2.2μF 50V	126F225S
C316		Electrolytic 1μF 50V	126F105S
C317		Electrolytic 1μF 50V	126F105S
C318		Electrolytic 10μF 50V	126F106S
C319		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C320		Chip Ceramic 82pF CH 50V	CHE1JJBCH820
C322		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C323		Chip Ceramic 130pF J SL 50V	CHE1JJBSL131
C324		Chip Ceramic 47pF J SL 50V	CHE1JJBSL470
C325		Chip Ceramic 91pF CH 50V	CHE1JJBCH910
C326		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C327		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C329		Chip Ceramic 16pF CH 50V	CHE1JJBCH160
C330		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C502		Electrolytic 100μF16 V	126C107S
C503		Mylar 0.01μF J or Mylar 0.01μF J	2254103S 1254103S
C504		Electrolytic 0.68μF 50V L or Electrolytic 0.68μF 50V L	124S684S CE1JMAULLR68
C506		Electrolytic 100μF16 V	126C107S
C507		Chip Ceramic 10pF J SL 50V	CHE1JJBSL100
C508		Electrolytic 0.68μF 50V L or Electrolytic 0.68μF 50V L	124S684S CE1JMAULLR68
C509		Electrolytic 1000μF 16V	626C108
C510		Mylar 0.047μF J or Mylar 0.047μF J	2254473S 1254473S
C511		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C551		Chip Ceramic 330 pF YB 50V	CHE1JKB0B331
C552		Electrolytic 47μF 16V	126C476S
C553		Mylar 0.047μF J or Mylar 0.047μF J	2254473S 1254473S
C555		P.P. 0.033μF/200 V ECQF Type	CBP2DKD00333
C556		Electrolytic 4.7μF 25V UHA1E4R7KRA1AA (BP.Cap)	CA1E4R7NC007
C557		Electrolytic 1μF 160V	CE2CMASTL010
C558		P.P. 1800pF 630 V ECQT Type	CBP2KKD00182
C559		Ceramic 0.0033μF 1KV B or Ceramic 0.0033μF 1KV B	CCD3AKP0B332 6220577
C651		Electrolytic 470μF 16V	126C477S

Ref. No.	⚠	Description	Part No.
C652		Electrolytic 4.7μF 160V	CE2CMASL4R7
C653		Electrolytic 470μF 25V	626D477
C656		Electrolytic 1000μF 10V	626B108
C659		Electrolytic 100μF 10V	126B107S
C661		Electrolytic 1μF 50V	126F105S
C701		Electrolytic 470μF 10V	126B477S
C702		Electrolytic 470μF 10V	126B477S
C703		Electrolytic 1000μF 10V	626B108
C705		Electrolytic 10μF 50V	126F106S
C706		Electrolytic 10μF 50V	126F106S
C707		Electrolytic 10μF 50V	126F106S
C708		Electrolytic 1μF 50V	126F105S
C709		Electrolytic 1μF 50V	126F105S
C710		Electrolytic 1μF 50V	126F105S
C711		Electrolytic 10μF 50V	126F106S
C712		Electrolytic 1000μF 16V	126C108
C713		Chip Ceramic 1000 pF YB 50V	CHE1JKB0B102
C714		Electrolytic 22μF 25V	126D226S
C715		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C716		Chip Ceramic 100pF CH 50V	CHE1JJBCH101
C801		Electrolytic 220μF 16V	126C227S
C802		Electrolytic 0.1μF 50V	126F104S
C803		Chip Ceramic 0.022μF FZ 50V	CHE1JZB0F223
C804		Electrolytic 10μF 50V	126F106S
C805		Electrolytic 1μF 50V	126F105S
C807		Ceramic 0.047μF	12Y2473S
C809		Electrolytic 100μF 10V	126B107S
C810		Electrolytic 220μF 16V	126C227S
C811		Chip Ceramic 0.0068μF YB 50V	CHE1JKB0B682
Diodes			
D301		Semi-Conductor 1SS133	1SS133S
D302		Semi-Conductor 1SS133	1SS133S
D303		Semi-Conductor 1SS133	1SS133S
D502		Semi-Conductor ERA15-02 Radial Taping	QDNZ0ERA1502
D503		Semi-Conductor 1SS133	1SS133S
D651		Semi-Conductor ERB44-04 L3	QDQZ0ERB4404
D652		Semi-Conductor ERA32-02	QDQZ0ERA3202
D653		Semi-Conductor ERB44-04 L3	QDQZ0ERB4404
D654		Semi-Conductor Zener MTZ6.8B	MTZ6.8BS
D655		Semi-Conductor Zener MTZJ33B	MTZJ33BS
D656		Semi-Conductor Zener MTZ9R1C	MTZ9RICS
D657		Semi-Conductor 1SS133	1SS133S
ICs			
IC301		LA7672	QSBLa0ZSY018
IC501		LA7837	QSBLa0ZSY003
IC701		LA7222	GLA7222*****
IC801		AN5265	14LN160
Jacks			
J701		RCA YKC21-3075	JXRL020JC010
J702		RCA YKC21-3075	JXRL020JC010
J703		RCA YKC21-3075	JXRL020JC010
J704		RCA YKC21-3075	JXRL020JC010
J801		Earphone	JYSL030HD002
Coils			
L102		Micro Inductor 100μH or	2165101S

Ref. No.		Description	Part No.
L201		Micro Inductor 100μH Micro Inductor 100μH or Micro Inductor 100μH	2162101S 2165101S 2162101S
L202		Micro Inductor 1.2μH or Micro Inductor 1.2μH	2165129S 2162129S
L203		Micro Inductor 1 μH or Micro Inductor 1 μH	2165109S 2162109S
L221		Micro Inductor 22μH or Micro Inductor 22μH	2165220S 2162220S
L222		Micro Inductor 100μH or Micro Inductor 100μH	2165101S 2162101S
L223		Micro Inductor 22μH or Micro Inductor 22μH	2165220S 2162220S
L224		Micro Inductor 15μH RD or Micro Inductor 15μH RD	2162150S 2165150S
L225		IFT HW-6227 VCO or IFT HW-6227 VCO	LFA08V0TK003 LFA07V0MM026
L226		IFT MA-6343 AFT or IFT MA-6343 AFT	LFA08V0TK001 LFA07V0MM027
L301		Micro Inductor 22μH or Micro Inductor 22μH	2165220S 2162220S
L302		Micro Inductor 10μH or Micro Inductor 10μH	2165100S 2162100S
L303		Micro Inductor 100μH or Micro Inductor 100μH	2165101S 2162101S
L551		Linearity ELH5L48 23μH	LLBD00DMS001
L651		Choke RCH-895 33μH	LLARZGZSF330
L701		Micro Inductor 100μH or Micro Inductor 100μH	2165101S 2162101S
Transistors			
Q103		Semi-Conductor 2SC1740	C1740RZ
Q171		Semi-Conductor DTC124XS	QQSZDTC124XS
Q172		Semi-Conductor DTC124XS	QQSZDTC124XS
Q173		Semi-Conductor DTC124XS	QQSZDTC124XS
Q174		Semi-Conductor DTC124XS	QQSZDTC124XS
Q175		Semi-Conductor 2SC1740	C1740RZ
Q201		Semi-Conductor 2SC3000	C3000ES
Q221		Semi-Conductor 2SC1740	C1740RZ
Q301		Semi-Conductor 2SC1740	C1740RZ
Q302		Semi-Conductor 2SC1740	C1740RZ
Q303		Semi-Conductor 2SA933	A933RZ
Q305		Semi-Conductor 2SC1740	C1740RZ
Q306		Semi-Conductor 2SA933	A933RZ
Q551		Semi-Conductor 2SD1423	QQSR02SD1423
Q552		Semi-Conductor 2SD1271B	QQPP2SD1271B
Q651		Semi-Conductor 2SD439	QQPE002SD439
Q701		Semi-Conductor 2SC1740	C1740RZ
Q702		Semi-Conductor 2SC1740	C1740RZ
Q703		Semi-Conductor 2SC1740	C1740RZ
Q704		Semi-Conductor 2SC1740	C1740RZ
Q705		Semi-Conductor DTC124XS	QQSZDTC124XS
Resistors			
R125		Chip 1/10W J 1.8 KΩ	RRXAJBBZ0182
R130		Chip 1/10W J 220 KΩ	RRXAJBBZ0224
R131		Chip 1/10W J 1 MΩ	RRXAJBBZ0105
R136		Chip 1/10W J 47KΩ	RRXAJBBZ0473
R169		Chip 1/10W J 10 KΩ	RRXAJBBZ0103

Ref. No.	⚠	Description	Part No.
R172		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R173		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R201		Chip 1/10W J 82 Ω	RRXAJBBZ0820
R202		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R203		Chip 1/10W J 1.5 KΩ	RRXAJBBZ0152
R204		Chip 1/10W J 330 Ω	RRXAJBBZ0331
R205		Chip 1/10W J 33 Ω	RRXAJBBZ0330
R206		Chip 1/10W J 100 Ω	RRXAJBBZ0101
R207		Chip 1/10W J 470 Ω	RRXAJBBZ0471
R208		Metal 1W 68Ω	534A680
R209		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R221		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R222		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R223		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R224		Chip 1/10W J 820 Ω	RRXAJBBZ0821
R226		Chip 1/10W J 150 Ω	RRXAJBBZ0151
R227		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R228		Chip 1/10W J 47 KΩ	RRXAJBBZ0473
R229		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R230		Chip 1/10W J 3.3 KΩ	RRXAJBBZ0332
R231		Chip 1/10W J 2.2 KΩ	RRXAJBBZ0222
R232		Chip 1/10W J 330 Ω	RRXAJBBZ0331
R233		Chip 1/10W J 330 Ω	RRXAJBBZ0331
R234		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R236		Chip 1/10W J 330 Ω	RRXAJBBZ0331
R237		Chip 1/10W J 3.9 Ω	RRXAJBBZ03R9
R238		Chip 1/10W J 82 KΩ	RRXAJBBZ0823
R241		Chip 1/10W J 2.2 KΩ	RRXAJBBZ0222
R242		Chip 1/10W J 2.2 KΩ	RRXAJBBZ0222
R301		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R302		Chip 1/10W J 6.8KΩ	RRXAJBBZ0682
R303		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R304		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R305		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R306		Chip 1/10W J 220 Ω	RRXAJBBZ0221
R307		Chip 1/10W J 220 Ω	RRXAJBBZ0221
R308		Chip 1/10W J 220 Ω	RRXAJBBZ0221
R309		Carbon 1/4W 10KΩ	1345103S
R310		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R311		Chip 1/10W J 27 KΩ	RRXAJBBZ0273
R312		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R313		Chip 1/10W J 3.3 KΩ	RRXAJBBZ0332
R314		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R315		Chip 1/10W J 390 KΩ	RRXAJBBZ0394
R316		Chip 1/10W J 560 Ω	RRXAJBBZ0561
R317		Carbon 1/4W 1KΩ	1345102S
R318		Chip 1/10W J 820 Ω	RRXAJBBZ0821
R319		Chip 1/10W J 2.2 KΩ	RRXAJBBZ0222
R320		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R321		Chip 1/10W J 6.8KΩ	RRXAJBBZ0682
R322		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R323		Chip 1/10W J 680 KΩ	RRXAJBBZ0684
R324		Chip 1/10W J 470 Ω	RRXAJBBZ0471
R325		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R326		Chip 1/10W J 470 Ω	RRXAJBBZ0471
R327		Chip 1/10W J 470 Ω	RRXAJBBZ0471
R328		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R329		Chip 1/10W J 1.2 KΩ	RRXAJBBZ0122
R330		Chip 1/10W J 68 KΩ	RRXAJBBZ0683
R331		Chip 1/10W J 8.2 KΩ	RRXAJBBZ0822

Ref. No.	△	Description	Part No.
R332		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R333		Chip 1/10W J 18 KΩ	RRXAJBBZ0183
R334		Chip 1/10W J 270 KΩ	RRXAJBBZ0274
R335		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R337		Chip 1/10W J 100 Ω	RRXAJBBZ0101
R338		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472
R339		Chip 1/10W J 560 Ω	RRXAJBBZ0561
R504		Chip 1/10W J 68 KΩ	RRXAJBBZ0683
R505		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R506		Chip 1/10W J 120 KΩ	RRXAJBBZ0124
R507		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R508		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472
R509		Chip 1/10W J 120 KΩ	RRXAJBBZ0124
R510		Carbon 1/4W 2.2 Ω	1345229S
R511		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R512		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R513		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R514		Chip 1/10W J 1.5 KΩ	RRXAJBBZ0152
R515		Carbon 1KΩ 1/4W	1345102S
R516		Carbon 1/4W 47 KΩ	1345473S
R551		Chip 1/10W J 330 Ω	RRXAJBBZ0331
R553		Carbon 1/4W 100 Ω	1345101S
R554		Carbon 1/4W 270 Ω	1345271S
R558		Carbon 1/4W 680KΩ	1345684S
R560		Carbon 1/4W 10KΩ	1345103S
R651		Carbon 1/4W 1KΩ	1345102S
R655		Fuse 1W 2.2 Ω or Fuse 1W 2.2 Ω	5363229 5368229
R656		Chip 1/10W J 12 KΩ	RRXAJBBZ0123
R657		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R658		Metal 1W 33KΩ	534A333
R659		Carbon 1/4W 1KΩ	1345102S
R701		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R702		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R703		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R704		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R705		Chip 1/10W J 82 KΩ	RRXAJBBZ0823
R706		Chip 1/10W J 75 Ω	RRXAJBBZ0750
R708		Chip 1/10W J 100 KΩ	RRXAJBBZ0104
R709		Chip 1/10W J 75 Ω	RRXAJBBZ0750
R710		Chip 1/10W J 47KΩ	RRXAJBBZ0473
R711		Chip 1/10W J 75 Ω	RRXAJBBZ0750
R712		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R713		Carbon 1/4W 270 Ω	1345271S
R714		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R715		Chip 1/10W J 1.2 KΩ	RRXAJBBZ0122
R716		Chip 1/10W J 47KΩ	RRXAJBBZ0473
R717		Chip 1/10W J 560 Ω	RRXAJBBZ0561
R718		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R719		Chip 1/10W J 470 Ω	RRXAJBBZ0471
R720		Chip 1/10W J 680 Ω	RRXAJBBZ0681
R721		Chip 1/10W J 1.5 KΩ	RRXAJBBZ0152
R722		Chip 1/10W J 75 Ω	RRXAJBBZ0750
R723		Chip 1/10W J 820 Ω	RRXAJBBZ0821
R724		Chip 1/10W J 820 Ω	RRXAJBBZ0821
R725		Chip 1/10W J 820 Ω	RRXAJBBZ0821
R726		Chip 1/10W J 47 Ω	RRXAJBBZ0470
R801		Carbon 1/4W 10 Ω	1345100S
R802		Chip 1/10W J 8.2KΩ	RRXAJBBZ0822
R804		Chip 1/10W J 680 Ω	RRXAJBBZ0681

Ref. No.		Description	Part No.
R805		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R806		Carbon 1/4W 100 Ω	1345101S
R807		Chip 1/10W J 3.9 Ω	RRXAJBBZ03R9
Variable Resistors			
VR221		Semi Fixed Res. 10K Ω B H.6 ϕ RF AGC or Semi Fixed Res. 10K Ω B H.6 ϕ RF AGC	138J781 VRCB103KA010
VR301		Semi Fixed 30K Ω B H.6 ϕ Sub BRT. or Semi Fixed 30K Ω B H.6 ϕ Sub BRT.	138J783 VRCB303KA010
VR501		Semi Fixed 30K Ω B H.6 ϕ V-Size or Semi Fixed 30K Ω B H.6 ϕ V-Size	138J783 VRCB303KA010
Miscellaneous			
CF221		Ceramic Discre CDA4.5ME42S	FYG455PMR001
CF222		Ceramic Filter SFSH4.5MCB	FBB455PMR001
CF223		Ceramic Trap TPS4.5MB2	1810897
CN102		Connector Base IMSA-9115S-17L	JTEE017ER002
CN151		Connector Base TFC-B13Y-E1 (13P) for u-Com.	JCTFC13TG001
CN201		Connector Pin 1P for ANT	5700270
CN301		Connector Base TFC-B13Y-E1 (13P) for u-Com	JCTFC13TG001
CN501		Connector Base 5045-05A (5P) for DY	J550E05NF001
CN701		Connector Base TFC-B08Y-E1 (8P) for AV	JCTFC08TG001
DY501		CRT A13KQS12X01	TCRT1C0SM005
FB301		Beads Core	1190038
FH601A		Fuse Holder	XH03Z00JC001
FH601B		Fuse Holder	XH03Z00JC001
FH621A		Fuse Holder	XH03Z00JC001
FH621B		Fuse Holder	XH03Z00JC001
LD171		Wire 100mm (1P)	WX3301A6FF10
LD183		Wire Assembly	WX1B3000-011
LD184		Wire Assembly	WX1B3000-009
SAW201		Saw Filter KAF-45MR-ML	FBB456PKC001
T551		H.Drive Trans MS-101N	LTH01CPSF001
T552		FBT FTE05A001	LTF00CPSM002
TU201		Tuner ENV-568G1G3	UTUNNTUMS006
XT301		Crystal Oscillator 3.58 MHz or Crystal Oscillator 3.58 MHz	1811203 1811291
XT302		Ceramic Resonator CSB503F45 FBT Shield Plate Text Pin 1.0X9.5 AFT ADJ.	FY0153PMR001 0EM401083 IPS-117

DC-DC CBA

Ref. No.		Description	Part No.
		CBA DC-DC Consists of the following:	-----
Capacitors			
C101		Electrolytic 470 μ F 10V	126B477S
C102		Chip Ceramic 0.022 μ F FZ 50V	CHE1JZB0F223
C103		Chip Ceramic 0.022 μ F FZ 50V	CHE1JZB0F223
C104		Chip Ceramic 22pF CH50V	CHE1JJBCH220
C105		Chip Ceramic 30pF CH 50V	CHE1JJBCH300
C106		Chip Ceramic 30pF CH 50V	CHE1JJBCH300
C110		Chip Ceramic 1000 pF YB 50V	CHE1JKB0B102
C111		Chip Ceramic 100 pF J SL 50V	CHE1JJB SL101
C112		Chip Ceramic 100 pF J SL 50V	CHE1JJB SL101
C113		Chip Ceramic 100 pF J SL 50V	CHE1JJB SL101
C114		Electrolytic 47 μ F 10V	126B476S

Ref. No.		Description	Part No.
C131		Chip Ceramic 0.022μF FZ 50V	CHE1JZB0F223
C151		Electrolytic 10μF 50V	126F106S
C152		Electrolytic 10μF 50V	126F106S
C153		Electrolytic 10μF 50V	126F106S
C154		Electrolytic 10μF 50V	126F106S
C156		Electrolytic 0.47μF 50V	126F474S
C157		Electrolytic 1μF 50V	126F105S
C160		Chip Ceramic 0.01 μF FZ 50V	CHE1JZB0F103
C161		Electrolytic 100 μF 16V	126C107S
C171		Electrolytic 10μF 50V	126F106S
C623		Electrolytic 47μF 25V	126D476S
C625		Chip Ceramic 1000pF YB 50V	CHE1JKB0B102
C626		Electrolytic 10μF 50V	126F106S
C627		Mylar 1000pF J or Mylar 1000pF J	2254102S 1254102S
C628		Mylar 0.022μF J or Mylar 0.022μF J	2254223S 1254223S
C629		Chip Ceramic 1000pF YB 50V	CHE1JKB0B102
C630		Chip Ceramic 1000pF YB 50V	CHE1JKB0B102
C631		Chip Ceramic 100 pF J SL 50V	CHE1JJBSL101
C632		Electrolytic UPY1C102MPH1AA 1000μF / 16V	CE1CMZNAA102
C634		Chip Ceramic 0.01μF YB 50V	CHE1JZB0B103
C635		Electrolytic 470μF 16V	126C477S
C636		Chip Ceramic 0.01μF FZ 50V	CHE1JZB0F103
C641		Electrolytic 47μF 16V	126C476S
C642		Electrolytic 47μF 16V	126C476S
C643		Electrolytic 47μF 16V	126C476S
C644		Electrolytic 1000μF / 10V	626B108
C646		Electrolytic 47μF 16V	126C476S
Diodes			
D101		Semi-Conductor 1SS133	1SS133S
D102		Semi-Conductor 1SS133	1SS133S
D104		Semi-Conductor 1SS133	1SS133S
D105		Semi-Conductor 1SS133	1SS133S
D106		Semi-Conductor 1SS133	1SS133S
D107		Semi-Conductor 1SS133	1SS133S
D108		Semi-Conductor 1SS133	1SS133S
D109		Semi-Conductor 1SS133	1SS133S
D141		Semi-Conductor 1SS133	1SS133S
D143		Semi-Conductor 1SS133	1SS133S
D151		Semi-Conductor 1SS133	1SS133S
D152		Semi-Conductor 1SS133	1SS133S
D153		Semi-Conductor 1SS133	1SS133S
D154		Semi-Conductor 1SS133	1SS133S
D155		Semi-Conductor 1SS133	1SS133S
D621		Semi-Conductor ERA15-02 Radial Taping	QDNZ0ERA1502
D622		Semi-Conductor RK-34	ARK34LFA1000
D623		Semi-Conductor ERA15-02 Radial Taping	QDNZ0ERA1502
D624		Semi-Conductor Zener MTZ9.1B	MTZ9.1BS
D625		Semi-Conductor ERA15-02 Radial Taping	QDNZ0ERA1502
D626		Semi-Conductor 1SS133	1SS133S
D627		Semi-Conductor Zener MTZ8.2B	MTZ8.2BS
D628		Semi-Conductor 1SS133	1SS133S
ICs			
IC101		TMP47C634N-R504	QSMQA0ST010
IC102		MN1280R	14DN160
IC103		MN1280R	14DN160
IC621		uPC494C	QSBLa0ZNE014

Ref. No.		Description	Part No.
IC624		AN78L05	AN78L05
Coils			
L101		IFT OSD or IFT OSD	LFA08V0TK002 113M807
L622		Choke ELCISE008 94μH	LLBD00PMS004
L623		Choke RCH-875 10μH	LLARMLASF100
Transistors			
Q101		Semi-Conductor 2SC1740	C1740RZ
Q102		Semi-Conductor DTC124XS	QQSZDTC124XS
Q114		Semi-Conductor DTC124XS	QQSZDTC124XS
Q115		Semi-Conductor DTC124XS	QQSZDTC124XS
Q141		Semi-Conductor 2SC1740	C1740RZ
Q151		Semi-Conductor 2SC1740	C1740RZ
Q152		Semi-Conductor 2SC1740	C1740RZ
Q153		Semi-Conductor 2SC1740	C1740RZ
Q154		Semi-Conductor 2SC1740	C1740RZ
Q155		Semi-Conductor 2SC1740	C1740RZ
Q156		Semi-Conductor 2SA933	A933RZ
Q157		Semi-Conductor 2SC1740	C1740RZ
Q621		Semi-Conductor 2SA1679	QQPZ02SA1679
Q622		Semi-Conductor 2SC1740	C1740RZ
Q623		Semi-Conductor 2SD1682 or Semi-Conductor 2SD1682	QQ3S02SD1682 QQ3T02SD1682
Q624		Semi-Conductor 2SD1682 or Semi-Conductor 2SD1682	QQ3S02SD1682 QQ3T02SD1682
Q625		Semi-Conductor 2SC1740	C1740RZ
Q626		Semi-Conductor 2SD1682 or Semi-Conductor 2SD1682	QQ3S02SD1682 QQ3T02SD1682
Q627		Semi-Conductor 2SC1740	C1740RZ
Q628		Semi-Conductor DTC124XS	QQSZDTC124XS
Resistors			
R101		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R102		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R103		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R104		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R105		Chip 1/10W J 5.6 KΩ	RRXAJBBZ0562
R106		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R107		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R108		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R109		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R110		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R111		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472
R112		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R115		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R116		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472
R118		Chip 1/10W J 47KΩ	RRXAJBBZ0473
R119		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R120		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R121		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R122		Chip 1/10W J 100 Ω	RRXAJBBZ0101
R126		Chip 1/10W J 10 KΩ	RRXAJBBZ0103
R127		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R128		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R132		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R133		Chip 1/10W J 56 KΩ	RRXAJBBZ0563
R134		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472
R135		Chip 1/10W J 4.7 KΩ	RRXAJBBZ0472

Ref. No.		Description	Part No.
R137		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R139		Chip 1/10W J 100 Ω	RRXAJBBZ0101
R140		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R141		Chip 1/10W J 1 K Ω	RRXAJBBZ0102
R142		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R143		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R145		Chip 1/10W J 6.8K Ω	RRXAJBBZ0682
R146		Chip 1/10W J 4.7 K Ω	RRXAJBBZ0472
R151		Chip 1/10W J 5.6 K Ω	RRXAJBBZ0562
R152		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R153		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R154		Chip 1/10W J 120 K Ω	RRXAJBBZ0124
R155		Chip 1/10W J 5.6 K Ω	RRXAJBBZ0562
R156		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R157		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R158		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R159		Chip 1/10W J 1 K Ω	RRXAJBBZ0102
R160		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R161		Chip 1/10W J 39 K Ω	RRXAJBBZ0393
R162		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R163		Chip 1/10W J 5.6 K Ω	RRXAJBBZ0562
R164		Chip 1/10W J 68 K Ω	RRXAJBBZ0683
R165		Chip 1/10W J 4.7 K Ω	RRXAJBBZ0472
R167		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R168		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R170		Chip 1/10W J 22 K Ω	RRXAJBBZ0223
R174		Chip 1/10W J 10K Ω	RRXAJBBZ0103
R626		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R627		Chip 1/10W J 2.7 K Ω	RRXAJBBZ0272
R628		Chip 1/10W J 100 K Ω	RRXAJBBZ0104
R629		Chip 1/10W J 1 K Ω	RRXAJBBZ0102
R630		Chip 1/10W J 47K Ω	RRXAJBBZ0473
R631		Chip 1/10W J 5.6 K Ω	RRXAJBBZ0562
R632		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R633		Carbon 1/4W 100 Ω	1345101S
R634		Carbon 1/4W 220 Ω	1345221S
R635		Carbon 1/4W 220 Ω	1345221S
R636		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R638		Chip 1/10W J 1 K Ω	RRXAJBBZ0102
R639		Fusible 1/4W 2.2 Ω	5366229
R640		Fusible 1/2W 1 Ω	1330868
R641		Carbon 1/4W 220 Ω	1345221S
R642		Carbon 1/4W 220 Ω	1345221S
R643		Chip 1/10W J 820 K Ω	RRXAJBBZ0824
R644		Carbon 1/4W 220 Ω	1345221S
R645		Chip 1/10W J 4.7 K Ω	RRXAJBBZ0472
R646		Chip 1/10W J 470 Ω or Chip 1/10W J 1.2 K Ω	RRXAJBBZ0471 RRXAJBBZ0122
R647		Chip 1/10W J 10 K Ω	RRXAJBBZ0103
R648		Carbon 1/4W 1K Ω	1345102S
R650		Carbon 1/4W 100 Ω	1345101S
R707		Chip 1/10W 4.7K Ω	RRXAJBBZ0472
Variable Resistor			
VR621		Semi Fixed 2K Ω B H.6 ϕ +B Reg. or Semi Fixed 2K Ω B H.6 ϕ +B Reg.	VRCB202KA010 138J778
Miscellaneous			
CN102		Connector Base IMSA-9115S-17L	JTEE017ER002
CN301		Connector Base TFC-B13Y-E1 (13P) for U-Com.	JCTFC13TG001

Ref. No.		Description	Part No.
CN701		Connector Base TFC-B08Y-E1 (8P) for AV	JCTFC08TG001
CN702		Connector Base IL-S-10P-S2L2-EF VCR SG	1740783
F621		Fuse 125V/250V 3A	5790041
FB621		Beads Core	1190038
J621		DC Jack HEC2305-01-250 DC Input	JYDLDD0HD001
LD103		Wire Assembly VCR +B	WX1B3000-006
LD104		Wire 200mm	WX3001A4FF20
XT101		Ceramic Resonator KBR-4.19MSA	FY0415LKC001
		Micon Shield A	OEM401079
		Micon Shield B	OEM401080
		Heat Sink AP	OEM401156
		Power Trans	LTT55LKT001

CRT CBA

Ref. No.		Description	Part No.
		CBA CRT Consists of the following:	-----
Capacitors			
C451		Chip Ceramic 220pF YB50V	CHE1JKB0B221
C452		Chip Ceramic 150 pF J	CHE1JJBLS151
C453		Chip Ceramic 220 pF YB 50V	CHE1JKB0B221
C454		Ceramic 0.001μF 2KV B or Ceramic 0.001μF 2KV B	CCD3DKP0B102 6220585
Transistors			
Q451		Semi-Conductor 2SC1473	QQR02SC1473
Q452		Semi-Conductor 2SC1473	QQR02SC1473
Q453		Semi-Conductor 2SC1473	QQR02SC1473
Resistors			
R451		Carbon 1/4W 33KΩ	1345333S
R452		Carbon 1/4W 33KΩ	1345333S
R453		Carbon 1/4W 33KΩ	1345333S
R454		Carbon 1/4W 2.7KΩ	1345272S
R456		Carbon 1/4W 2.7KΩ	1345272S
R458		Carbon 1/4W 2.7KΩ	1345272S
R460		Chip 1/10W J 560 Ω	RRXAJBBZ0561
R461		Chip 1/10W J 680 Ω	RRXAJBBZ0681
R463		Chip 1/10W J 560 Ω	RRXAJBBZ0561
R464		Chip 1/10W J 1.2 KΩ	RRXAJBBZ0122
R465		Chip 1/10W J 1.2 KΩ	RRXAJBBZ0122
R466		Chip 1/10W J 1.2 KΩ	RRXAJBBZ0122
R467		Carbon 1/4W 33KΩ	1345333S
R468		Carbon 1/4W 33KΩ	1345333S
R469		Carbon 1/4W 33KΩ	1345333S
Variable Resistors			
VR451		Semi Fixed 200 Ω B V.6¢ R.Drive	138J910
VR452		Semi Fixed 10KΩ B V.6¢ R. Cut Off	138J917
VR453		Semi Fixed 10KΩ B V.6¢ G. Cut Off	138J917
VR454		Semi Fixed 200Ω B V.6¢ B. Drive	138J910
VR455		Semi Fixed 10KΩ B V.6¢ B.Cutoff	138J917
Miscellaneous			
CN453		Connector Pin 1P for CRT GND or Connector Pin 1P for CRT GND	1730688 1700576
L451		Micro Inductor 100μH or Micro Inductor 100μH	2165101S 2162101S

Ref. No.	⚠	Description	Part No.
LD451		Wire 250mm RGB (5P)	WX3805J67726
LD451		Wire Holder 5P 51039-0500 or	XW01D05NF001
		Wire Holder 5P 51039-0500	XW01B05NF001
LD452		Wire 150mm +B (3P)	WX3803J67716
LD452		Wire Holder 3P 51039-0300 or	XW01D03NF001
		Wire Holder 3P 51039-0300	XW01B03NF001
LD454		Wire	WX3001A45507
SG451		Spark Gaps AG10PC492GS-L3N	QVPZAG10PC49
		CRT Socket	JSCC200PK001
J451		CRT Socket W/CRT	JSCC200PK001

Control CBA

Ref. No.	⚠	Description	Part No.
		CBA Control Consists of the following:	-----
Capacitors			
C181		Electrolytic 47μF 16V	126C476S
C183		TF 0.1μF J	125U104
C184		Chip Ceramic 100pF CH 50V	CHE1JJBCH101
C185		Chip Ceramic 100pF CH 50V	CHE1JJBCH101
Diodes			
D181		Semi-Conductor Led SLR-37VR Power.Ind.	QPPZ0SLR37VR
D183		Semi-Conductor 1SS133	1SS133S
D184		Semi-Conductor 1SS133	1SS133S
D185		Semi-Conductor 1SS133	1SS133S
D186		Semi-Conductor 1SS133	1SS133S
IC			
IC181		uPD6600-758	QSMDOZNE011
Transistors			
Q182		Semi-Conductor DTC124XS	QQSZDTC124XS
Q183		Semi-Conductor DTC124XS	QQSZDTC124XS
Resistors			
R182		Chip 1/10W J 1 KΩ	RRXAJBBZ0102
R183		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
R184		Chip 1/10W J 22 KΩ	RRXAJBBZ0223
Switches			
SW101		Tact Switch EVQ235 (Power) or	SST0101MS014
		Tact Switch SKHVPB (Power)	SST0101AL020
SW102		Tact Switch EVQ235 (Display) or	SST0101MS014
		Tact Switch SKHVPB (Display)	SST0101AL020
SW103		Tact Switch EVQ235 (AV Mute) or	SST0101MS014
		Tact Switch SKHVPB (AV Mute)	SST0101AL020
SW104		Tact Switch EVQ235 (Picture) or	SST0101MS014
		Tact Switch SKHVPB (Picture)	SST0101AL020
SW105		Tact Switch EVQ235 (Vol. Down) or	SST0101MS014
		Tact Switch SKHVPB (Vol. Down)	SST0101AL020
SW106		Tact Switch EVQ235 (Vol. Up) or	SST0101MS014
		Tact Switch SKHVPB (Vol. Up)	SST0101AL020
SW107		Tact Switch EVQ235 (CH. Down) or	SST0101MS014
		Tact Switch SKHVPB (CH. Down)	SST0101AL020
SW108		Tact Switch EVQ235 (CH. Up) or	SST0101MS014
		Tact Switch SKHVPB (CH. Up)	SST0101AL020

Ref. No.	⚠	Description	Part No.
SW109		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW110		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW111		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW112		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW113		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW114		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW115		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW116		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW117		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW118		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW119		Tact Switch EVQ235 (Vol. Down) or Tact Switch SKHVPB (Vol. Down)	SST0101MS014 SST0101AL020
SW120		Tact Switch EVQ235 (Reset) or Tact Switch SKHVPB (Reset)	SST0101MS014 SST0101AL020
SW121		Tact Switch EVQ235 (Memory) or Tact Switch SKHVPB (Memory)	SST0101MS014 SST0101AL020
Miscellaneous			
CN801		Connector Base 2P for Speaker	1770247
LD181		Wire Assembly	WX1B3000-005
LD182		Wire Assembly for SW PB	WX1B3000-004
XT181		Ceramic Resonator KBR-455BKTLR Led Holder IL-T-2P-S2L2-W for Power IND.	FY0454LKC001 1730511

Power CBA

Ref. No.	⚠	Description	Part No.
		CBA Power Supply Consists of the following:	-----
Capacitors			
C601		Electrolytic 4700μF 35V	CE1GMZNTL472
C603		Ceramic 0.01μF 50V	32F3103S
C604		Ceramic 0.01μF 50V	32F3103S
C606		Ceramic 0.01μF 50V	32F3103S
Diodes			
D601	⚠	Semi-Conductor S2VB10	QDQZ00S2VB10
Miscellaneous			
F601	⚠	Fuse 125V / 250V 1.6A	5790038
R601	⚠	Solid Res. 3.3M Ω 1/2W UL	1330024
T601	⚠	Power Trans R25-S1-0037 AC Addapter	LTT55CLKT001
W601	⚠	AC Cord AC Addapter	WACO182LW003
W602		DC Cord AC Addapter	WX1B3000-010
		Power Shield A	0EM300415
		Power Shield B	0EM401077

Connector CBA

Ref. No.	⚠	Description	Part No.
		CBA Connector Consists of the following:	-----
CN101 LD103 LD182		Connector Base IMSA-9115B-17 Wire Assembly VCR +B Wire Assembly for Sw PCB	JTEE017ER001 WX1B3000-006 WX1B3000-004

Switches CBA

Ref. No.	⚠	Description	Part No.
		Switches CBA Consists of the following:	-----
D182 R185 SW122		Semi Conductor Led SLR-37VR Rec. Ind. Chip 1/10W J 1 KΩ Slide Switch HSW1840-01-210	QPPZ0SLR37VR RRXAJBBZ0102 SSS0101HD001

Chassis Electrical Assembly

Ref. No.	⚠	Description	Part No.
		Chassis Electrical Parts Consists of the following:	-----
J451 J451 LD101 LD201 LD453 LD551 LD552 LD801 SP801 V451		CRT A13KQS12X01 CRT Socket W/CRT Wire Assembly VCR A/V Wire Assembly Ant. Wire Assembly CRT GND Wire Assembly FBT. Wire Assembly FBT. Wire Assembly Speaker Speaker CRT A13KQS12X01	TCRT1C0SM005 JSCC200PK001 WX1B3000-001 WX1B3000-012 WX1B3000-002 WX1B3000-008 WX1B3000-013 WX1B3000-003 DSD0808DJ001 TCRT1C0SM005

VCR SECTION

PRODUCT SAFETY NOTE: Products marked with a  have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice of this service manual. Don't degrade the safety of the product through improper servicing.

NOTE: Parts that have no part numbers assigned (-----) are not available.

Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%	J.....±5%	Z.....+80/-20%
D.....±0.5%	K.....±10%	X.....+40/-20%
F.....±1%	M.....±20%	P.....+100%
G.....±2%	N.....±30%	

VCR Driver

Ref. No.		Description	Part No.
		VCR Driver CBA	0VSA04965
		Consists of the following:	
Capacitors			
C 851		Chip Electrolytic 33µF/16V M	121T336C
C 852		Chip Electrolytic 33µF/16V M	121T336C
C 853		Chip Electrolytic 33µF/16V M	121T336C
C 854		Chip Ceramic B K 0.001µF/50V	12B3102C
C 855		Chip Ceramic B K 0.01µF/50V	12B3103C
C 856		Tantalum 100µF/10V M	1224107
C 857		Chip Electrolytic 100µF/10V M	122Z786C
C 858		Chip Ceramic F Z 0.1µF/50V	12F3104C
C 859		Chip Tantalum 0.47µF/25V M or Chip Tantalum 0.47µF/25V M	1210474C CA1E474KC003
C 860		Chip Electrolytic (NP) 10µF/10V M H=5.7	122Z779C
C 861		Chip Ceramic B K 0.1µF/50V or Chip Ceramic B K 0.1µF/25V or Chip Ceramic B K 0.1µF/16V	12B3104C 12B2104C CA1C104RM001
C 862		Chip Ceramic F Z 1µF/16V	72F6105C
C 863		Chip Ceramic B K 0.0039µF/50V	12B3392C
C 864		Chip Electrolytic 47µF/6.3V M	121R476C
C 865		Chip Tantalum 2.2µF/10V M or Chip Tantalum 2.2µF/10V M	1224225C CA1A225KC003
C 866		Chip Tantalum 3.3µF/10V M or Chip Tantalum 3.3µF/10V M	1224335C CA1A335KC003
C 867		Chip Electrolytic 220µF/6.3V	CA0K221NC001
C 868		Chip Electrolytic 22µF/6.3V M	121R226C
C 869		Chip Electrolytic 10µF/16V M	121T106C
C 870		Chip Electrolytic 10µF/16V M	121T106C
C 871		Chip Electrolytic 10µF/16V M	121T106C
C 872		Chip Tantalum 1µF/16V M or Chip Tantalum 1µF/16V M	1225105C CA1C105KC003
C 873		Chip Tantalum 3.3µF/10V M or Chip Tantalum 3.3µF/10V M	1224335C CA1A335KC003
C 874		Chip Tantalum 1µF/16V M or Chip Tantalum 1µF/16V M	1225105C CA1C105KC003
C 875		Chip Ceramic SL J 820pF/50V	1270821C
C 876		Chip Ceramic B K 0.022µF/50V	12B3223C
C 877		Chip Tantalum 1µF/16V M or	1225105C

Ref. No.		Description	Part No.
C 878		Chip Tantalum 1μF/16V M	CA1C105KC003
		Chip Tantalum 1μF/16V M or	1225105C
		Chip Tantalum 1μF/16V M	CA1C105KC003
C 879		Chip Electrolytic 100μF/10V M	122Z786C
C 880		Chip Electrolytic 100μF/10V M	122Z786C
C 899		Chip Ceramic B K 680pF/50V	12B3681C
Connectors			
CN- 22		FPC 15P IL-402R-15S-S1L-SA	JC4RT15NBH0B
CN- 23		FPC 8P IL-402R- 8S-S1L-SA	JC4RT08NBH0B
CN- 24		IL-Z-04PL-SMTY	JCILD04NBH0C
CN- 26		IL-Z-04PL-SMTY	JCILD04NBH0C
Diodes			
D 851		Chip MA720	AMA720TX****
D 852		Chip MA720	AMA720TX****
ICs			
IC 851		CX20036-T1	GCX20036T1**
IC 852		CX20115A-T1	GCX20115AT1*
IC 853		ICX20114-T1	GCX20114T1**
Coils			
L 851		220μH	LLBC***SF001
L 852		Chip Inductor 100μH K	LLACKE2TE101
L 853		220μH	LLBC***SF001
Transistors			
Q 851		Chip 2SA1213(Y) or	QA1213TE12LY
		Chip 2SB1188(Q) or	QSB1188T101Q
		Chip 2SB1188(R)	QSB1188T101R
Q 852		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0
		Chip 2SA1622-7	Q2SA16227TL0
Q 853		Chip 2SA1213(Y) or	QA1213TE12LY
		Chip 2SB1188(Q) or	QSB1188T101Q
		Chip 2SB1188(R)	QSB1188T101R
Q 854		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 855		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0
		Chip 2SA1622-7	Q2SA16227TL0
QR 851		Chip DTC144WU	QTC144WUT106
QR 852		Chip DTA114YU	QTA114YUT106
Resistors			
R 851		Chip 1/8W J 2.2 Ω	134H229C
R 852		Chip 1/8W J 2.2 Ω	134H229C
R 853		Chip 1/8W J 2.2 Ω	134H229C
R 854		Chip 1/8W J 2.2 Ω	134H229C
R 855		Chip 1/10W J 8.2K Ω	134F822C
R 856		Chip 1/10W J 10 Ω	134F100C
R 857		Chip 1/10W J 10 Ω	134F100C
R 858		Chip 1/10W J 10 Ω	134F100C
R 859		Chip 1/10W J 330 Ω	134F331C
R 860		Chip 1/10W J 22K Ω	134F223C
R 861		Chip 1/10W J 15K Ω	134F153C
R 862		Chip 1/10W J 27K Ω	134F273C
R 863		Chip 1/10W J 2.7K Ω	134F272C
R 864		Chip 1/10W J 47K Ω	134F473C
R 865		Chip 1/10W J 10K Ω	134F103C

Ref. No.		Description	Part No.
R 866		Chip 1/10W J 10K Ω	134F103C
R 867		Chip 1/10W J 15K Ω	134F153C
R 868		Chip 1/10W J 330 Ω	134F331C
R 869		Chip 1/10W J 1K Ω	134F102C
R 870		Chip 1/10W J 5.6K Ω	134F562C
R 871		Chip 1/10W J 1K Ω	134F102C
R 872		Chip 1/10W J 3.9K Ω	134F392C
R 873		Chip 1/10W J 220K Ω	134F224C
R 874		Chip 1/10W J 390 Ω	134F391C
R 875		Chip 1/8W J 47 Ω	134H470C
R 876		Chip 1/8W J 47 Ω	134H470C
R 877		Chip 1/10W J 10K Ω	134F103C
R 878		Chip 1/10W J 120 Ω	134F121C
R 879		Chip 1/10W J 120 Ω	134F121C
R 880		Chip 1/10W J 120 Ω	134F121C
R 881		Chip 1/10W J 120 Ω	134F121C
R 882		Chip 1/10W J 4.7K Ω	134F472C
R 883		Chip 1/10W J 150K Ω	134F154C
R 884		Chip 1/10W J 22K Ω	134F223C
R 885		Chip 1/10W J 100 Ω	134F101C
R 886		Chip 1/10W J 12K Ω	134F123C
R 887		Chip 1/10W J 15K Ω	134F153C
R 888		Chip 1/10W J 18K Ω	134F183C
R 889		Chip 1/10W J 24K Ω	134F243C
R 890		Chip 1/10W J 10K Ω	134F103C
R 891		Chip 1/10W J 1K Ω	134F102C
R 892		Chip 1/10W J 330 Ω	134F331C
R 893		Chip 1/10W J 100 Ω	134F101C
R 899		Chip 1/10W J 680K Ω	134F684C
Miscellaneous			
FFC 2		FFC Wire 14P FFC 2:DRIVER 1	WX3914SZ3404
FFC 3		FFC Wire 12P FFC 3:DRIVER 2	WX3912SZ3404
S 851		Photo Transistor RPM-20PB	QRPM20PB****
S 852		Photo Transistor RPM-20PB	QRPM20PB****
S 854		Reel Sensor NJL5165KA or Sensor RPR-134C	PCZLAZZMH001 USESJRSRM002
S 856		Reel Sensor NJL5165KA or Sensor RPR-134C	PCZLAZZMH001 USESJRSRM002
SW 851		Push Switch SPPB53 PCB N1081/MOTOR	1622209 BN1081G02001

VCR Main

Ref. No.		Description	Part No.
		VCR Main CBA Consists of the following:	0VSA04967
Capacitors			
C 301		Electrolytic 22 μ F/6.3V M H7	526R226V
C 302		Chip Ceramic F Z 0.022 μ F/50V or Chip Ceramic F Z 0.022 μ F/25V or Chip Ceramic F Z 0.022 μ F/25V or Chip Ceramic F Z 0.022 μ F/50V	CHD1JZ80F223 CHD1EZ80F223 CHD1EZ80Z223 CHD1JZ80Z223
C 303		Chip Ceramic SL J 27pF/50V	CHD1JJ8SL270
C 307		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 308		Electrolytic 2.2 μ F/50V M H7	526W225V
C 309		Electrolytic 0.47 μ F/50V M H7	526W474V

Ref. No.		Description	Part No.
C 312		Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 313		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 314		Electrolytic 10 μ F/16V M H7	526T106V
C 315		Electrolytic 2.2 μ F/50V M H7	526W225V
C 316		Electrolytic 0.47 μ F/50V M H7	526W474V
C 317		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 318		Electrolytic 10 μ F/16V M H7	526T106V
C 319		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 320		Electrolytic 10 μ F/16V M H7	526T106V
C 321		Electrolytic 0.47 μ F/50V M H7	526W474V
C 323		Electrolytic 1 μ F/50V M H7	526W105V
C 324		Chip Ceramic B K 0.01 μ F/25V or Chip Ceramic B K 0.01 μ F/50V or Chip Ceramic B K 0.01 μ F/25V or Chip Ceramic B K 0.01 μ F/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 325		Chip Ceramic SL J 270pF/50V	CHD1JJ8SL271
C 326		**OS 33 μ F/10V M SL	CA1A330SY003
C 327		OS 10 μ F/16V M SC	CA1C106SY002
C 328		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 329		Chip Ceramic SL J 47pF/50V	CHD1JJ8SL470
C 330		OS 33 μ F/10V M SA	CA1A336SY001
C 332		Electrolytic 47 μ F/6.3V M H7	526R476V
C 333		Electrolytic 47 μ F/6.3V M H7	526R476V
C 334		Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V or Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V	CHD1JK80B102 CHD1EK80B102 CHD1JK80X102 CHD1EK80X102
C 335		Chip Ceramic CH J 470pF/50V	CHD1JJ8CH471
C 336		Electrolytic 4.7 μ F/25V M H5	121U475V
C 338		Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V or Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V	CHD1JK80B102 CHD1EK80B102 CHD1JK80X102 CHD1EK80X102
C 339		Electrolytic 220 μ F/6.3V M H7	526R227V
C 340		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 341		Electrolytic 4.7 μ F/25V M H5	121U475V
C 345		Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 346		Chip Tantalum 2.2 μ F/6.3V M or Chip Tantalum 2.2 μ F/6.3V M	1223225C CA0K225KC003
C 347		Chip Tantalum 4.7 μ F/6.3V M or Chip Tantalum 4.7 μ F/6.3V M	1223475C CA0K475KC003

NOTE: **OS = Aluminum Solid capacitors with Organic semiconductive electrolyte.

Ref. No.	⚠	Description	Part No.
C 348		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104
C 349		Electrolytic 10μF/16V M H7	526T106V
C 350		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 351		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 352		Electrolytic 10μF/16V M H7	526T106V
C 353		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 354		Electrolytic 10μF/16V M H7	526T106V
C 355		Electrolytic 10μF/16V M H7	526T106V
C 356		Chip Tantalum 2.2μF/6.3V M or Chip Tantalum 2.2μF/6.3V M	1223225C CA0K225KC003
C 357		Chip Tantalum 2.2μF/6.3V M or Chip Tantalum 2.2μF/6.3V M	1223225C CA0K225KC003
C 358		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 359		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 360		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 361		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 362		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 363		Electrolytic 1μF/50V M H7	526W105V
C 364		Chip Tantalum 4.7μF/6.3V M or Chip Tantalum 4.7μF/6.3V M	1223475C CA0K475KC003
C 365		Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125 or Chip Ceramic 1μF/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 366		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 367		Electrolytic 10μF/16V M H7	526T106V
C 368		Electrolytic 10μF/16V M H7	526T106V
C 369		Electrolytic 10μF/16V M H7	526T106V
C 370		Electrolytic 10μF/16V M H7	526T106V
C 371		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 372		Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V or Chip Ceramic B K 1000pF/50V or Chip Ceramic B K 1000pF/25V	CHD1JK80B102 CHD1EK80B102 CHD1JK80X102 CHD1EK80X102

Ref. No.		Description	Part No.
C 373		Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V	CHD1JZ80F223 CHD1EZ80F223 CHD1JZ80Z223 CHD1EZ80Z223
C 374		Electrolytic 10μF/16V M H7	526T106V
C 375		Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V	CHD1JZ80F223 CHD1EZ80F223 CHD1JZ80Z223 CHD1EZ80Z223
C 376		OS 47μF/6.3V M SA	CA0K476SY001
C 377		Electrolytic 3.3μF/50V M H7	526W335V
C 378		Chip Ceramic SL D 10pF/50V or Chip Ceramic SL C 10pF/50V	CHD1JD8SL100 CHD1JC8SL100
C 379		Electrolytic 10μF/16V M H7	526T106V
C 380		Chip Ceramic SL J 68pF/50V	CHD1JJ8SL680
C 381		Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V	CHD1JZ80F223 CHD1EZ80F223 CHD1JZ80Z223 CHD1EZ80Z223
C 382		Electrolytic 10μF/16V M H5	121T106V
C 383		Chip Ceramic SL J 390pF/50V	CHD1JJ8SL391
C 384		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 385		Chip Ceramic SL J 18pF/50V	CHD1JJ8SL180
C 386		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 387		Chip Ceramic B K 0.1μF/50V or Chip Ceramic B K 0.1μF/25V or Chip Ceramic B K 0.1μF/16V	12B3104C 12B2104C CA1C104RM001
C 388		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 389		Chip Ceramic SL J 180pF/50V	CHD1JJ8SL181
C 390		Chip Ceramic SL J 22pF/50V	CHD1JJ8SL220
C 391		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101
C 392		Chip Ceramic SL J 12pF/50V	CHD1JJ8SL120
C 393		Electrolytic 10μF/16V M H7	526T106V
C 394		Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/50V	CHD1JZ80F223 CHD1EZ80F223 CHD1EZ80Z223 CHD1JZ80Z223
C 395		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101
C 396		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 397		Chip Ceramic CH J 82pF/50V or Chip Ceramic CG J 82pF/50V	CHD1JJ8CH820 CHD1JJ8CG820
C 398		Chip Ceramic CH J 22pF/50V or Chip Ceramic CG J 22pF/50V	CHD1JJ8CH220 CHD1JJ8CG220
C 399		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 400		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 401		Chip Ceramic SL D 8pF/50V or Chip Ceramic SL C 8pF/50V	CHD1JD8SL8R0 CHD1JC8SL8R0
C 402		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101

Ref. No.	⚠	Description	Part No.
C 403		Electrolytic 10 μ F/16V M H5	121T106V
C 404		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 405		Chip Ceramic B K 0.01 μ F/25V or Chip Ceramic B K 0.01 μ F/50V or Chip Ceramic B K 0.01 μ F/25V or Chip Ceramic B K 0.01 μ F/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 406		OS 47 μ F/6.3V M SA	CA0K476SY001
C 407		Chip Ceramic F Z 0.022 μ F/50V or Chip Ceramic F Z 0.022 μ F/25V or Chip Ceramic F Z 0.022 μ F/50V or Chip Ceramic F Z 0.022 μ F/25V	CHD1JZ80F223 CHD1EZ80F223 CHD1JZ80Z223 CHD1EZ80Z223
C 408		Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 409		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 410		Chip Ceramic SL J 150pF/50V	CHD1JJ8SL151
C 411		Electrolytic 10 μ F/10V M NP	524T106V
C 412		Electrolytic 10 μ F/16V M H7	526T106V
C 419		Electrolytic 2.2 μ F/50V M H7	526W225V
C 420		Electrolytic 10 μ F/16V M H7	526T106V
C 421		Electrolytic 10 μ F/16V M H7	526T106V
C 422		Electrolytic 1 μ F/50V M H7	526W105V
C 423		Chip Ceramic B K 8200pF/50V or Chip Ceramic B K 8200pF/25V or Chip Ceramic B K 8200pF/50V or Chip Ceramic B K 8200pF/25V	CHD1JK80B822 CHD1EK80B822 CHD1JK80X822 CHD1EK80X822
C 424		Chip Ceramic SL J 680pF/50V	1270681C
C 425		Chip Ceramic B K 0.039 μ F/50V	12B3393C
C 426		Chip Ceramic B K 4700pF/50V or Chip Ceramic B K 4700pF/50V or Chip Ceramic B K 4700pF/25V or Chip Ceramic B K 4700pF/25V	CHD1JK80B472 CHD1JK80X472 CHD1EK80X472 CHD1EK80B472
C 427		Chip Ceramic CH C 5pF/50V or Chip Ceramic CG C 5pF/50V	CHD1JC8CH5R0 CHD1JC8CG5R0
C 428		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 429		Chip Tantalum 2.2 μ F/6.3V M or Chip Tantalum 2.2 μ F/6.3V M	1223225C CA0K225KC003
C 430		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101
C 431		Electrolytic 2.2 μ F/50V M H5	121W225V
C 432		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V	CHD1CZ80F104 CHD1EZ80F104 CHD1CZ80Z104 CHD1EZ80Z104
C 433		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 434		Electrolytic 4.7 μ F/25V M H5	121U475V
C 435		Electrolytic 47 μ F/6.3V M H5	121R476V
C 436		Electrolytic 1 μ F/50V M H5	121W105V
C 437		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V	CHD1CZ80F104 CHD1EZ80F104 CHD1CZ80Z104 CHD1EZ80Z104
C 438		Chip Ceramic CH C 5pF/50V or Chip Ceramic CG C 5pF/50V	CHD1JC8CH5R0 CHD1JC8CG5R0
C 439		Electrolytic 3.3 μ F/50V M H5	121W335V
C 440		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103

Ref. No.		Description	Part No.
C 441		Chip Ceramic F Z 0.01μF/25V Chip Ceramic F Z 0.047μF/16V or Chip Ceramic F Z 0.047μF/50V or Chip Ceramic F Z 0.047μF/25V or Chip Ceramic F Z 0.047μF/25V or Chip Ceramic F Z 0.047μF/16V	CHD1EZ80Z103 CHD1CZ80F473 CHD1JZ80F473 CHD1EZ80F473 CHD1EZ80Z473 CHD1CZ80Z473
C 442		Electrolytic 100μF/6.3V M H5	121R107V
C 443		Electrolytic 47μF/6.3V M H5	121R476V
C 444		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 445		Chip Ceramic F Z 0.022μF/50V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/25V or Chip Ceramic F Z 0.022μF/50V	CHD1JZ80F223 CHD1EZ80F223 CHD1EZ80Z223 CHD1JZ80Z223
C 446		Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V or Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V	CHD1JK80B222 CHD1EK80B222 CHD1JK80X222 CHD1EK80X222
C 447		Chip Ceramic B K 3900pF/50V or Chip Ceramic B K 3900pF/25V or Chip Ceramic B K 3900pF/50V or Chip Ceramic B K 3900pF/25V	CHD1JK80B392 CHD1EK80B392 CHD1JK80X392 CHD1EK80X392
C 448		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 449		Chip Ceramic B K 1500pF/50V or Chip Ceramic B K 1500pF/25V or Chip Ceramic B K 1500pF/50V or Chip Ceramic B K 1500pF/25V	CHD1JK80B152 CHD1EK80B152 CHD1JK80X152 CHD1EK80X152
C 450		Electrolytic 0.47μF/50V M H5	121W474V
C 451		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 452		Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/16V	CHD1EK80B223 CHD1EK80X223 CHD1CK80X223
C 453		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 455		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 456		Chip Ceramic B K 6800pF/50V or Chip Ceramic B K 6800pF/25V or Chip Ceramic B K 6800pF/50V or Chip Ceramic B K 6800pF/25V	CHD1JK80B682 CHD1EK80B682 CHD1JK80X682 CHD1EK80X682
C 457		Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V or Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V	CHD1JK80B222 CHD1EK80B222 CHD1JK80X222 CHD1EK80X222
C 458		Chip Ceramic SL J 120pF/50V	CHD1JJ8SL121
C 459		Chip Ceramic B K 3300pF/50V or Chip Ceramic B K 3300pF/25V or Chip Ceramic B K 3300pF/50V or Chip Ceramic B K 3300pF/25V	CHD1JK80B332 CHD1EK80B332 CHD1JK80X332 CHD1EK80X332
C 460		Electrolytic 47μF/6.3V M H5	121R476V
C 461		Electrolytic 47μF/6.3V M H5	121R476V
C 467		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103

Ref. No.		Description	Part No.
C 468		Chip Ceramic B K 0.01μF/50V Chip Tantalum 1μF/16V M or Chip Tantalum 1μF/16V M	CHD1JK80X103 1225105C CA1C105KC003
C 476		Chip Ceramic SL J 15pF/50V	CHD1JJ8SL150
C 479		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101
C 480		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 481		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 482		Electrolytic 22μF/6.3V M H5	121R226V
C 483		Chip Ceramic SL J 56pF/50V	CHD1JJ8SL560
C 484		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 485		Chip Ceramic SL J 82pF/50V	CHD1JJ8SL820
C 486		Chip Ceramic B K 3300pF/50V or Chip Ceramic B K 3300pF/25V or Chip Ceramic B K 3300pF/50V or Chip Ceramic B K 3300pF/25V	CHD1JK80B332 CHD1EK80B332 CHD1JK80X332 CHD1EK80X332
C 487		Chip Ceramic F Z 0.1μF/16V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/25V or Chip Ceramic F Z 0.1μF/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 488		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 489		Electrolytic 22μF/6.3V M H7	526R226V
C 490		Chip Ceramic B K 0.027μF/50V	12B3273C
C 491		Chip Ceramic SL J 68pF/50V	CHD1JJ8SL680
C 492		Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V or Chip Ceramic B K 2200pF/50V or Chip Ceramic B K 2200pF/25V	CHD1JK80B222 CHD1EK80B222 CHD1JK80X222 CHD1EK80X222
C 493		Chip Ceramic SL J 33pF/50V	CHD1JJ8SL330
C 494		Chip Ceramic SL J 180pF/50V	CHD1JJ8SL181
C 495		Chip Ceramic SL J 47pF/50V	CHD1JJ8SL470
C 496		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 497		Chip Ceramic SL J 27pF/50V	CHD1JJ8SL270
C 498		Chip Ceramic SL J 270pF/50V	CHD1JJ8SL271
C 499		Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/16V	CHD1EK80B223 CHD1EK80X223 CHD1CK80X223
C 501		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 502		Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V or Chip Ceramic B K 0.01μF/25V or Chip Ceramic B K 0.01μF/50V	CHD1EK80B103 CHD1JK80B103 CHD1EK80X103 CHD1JK80X103
C 503		Chip Ceramic SL D 10pF/50V or Chip Ceramic SL C 10pF/50V	CHD1JD8SL100 CHD1JC8SL100
C 504		Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/25V or Chip Ceramic B K 0.022μF/16V	CHD1EK80B223 CHD1EK80X223 CHD1CK80X223
C 506		Chip Ceramic SL J 82pF/50V	CHD1JJ8SL820
C 510		Chip Ceramic SL J 47pF/50V	CHD1JJ8SL470

Ref. No.		Description	Part No.
C 511		Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V or Chip Ceramic F Z 0.01μF/50V or Chip Ceramic F Z 0.01μF/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
Connectors			
CL- 6		B TO B 12P REC 4-175638-2	JC38T12APH0C
CL- 7		B TO B 18P REC 4-175638-8	JC38T18APH0C
CL- 8		B TO B 18P REC 4-175638-8	JC38T18APH0C
CL- 9		B TO B 12P REC 4-175638-2	JC38T12APH0C
CN- 1		IL-Z-10PL-SMTY	JCILD10NBH0C
CN- 2		IL-Z-05PL-SMTY	JCILD05NBH0C
CN- 5		IL-Z-10PL-SMTY	JCILD10NBH0C
Diodes			
D 331		Chip RD4.7M(B2)	ARD4R7MT1B2*
D 332		Chip DA115	ADA115T106**
D 333		Chip DAN202U	ADAN202UT106
D 351		Chip Schottky 1SS283	A1SS283T1***
D 352		Chip MA159	AMA159TX****
D 501		Chip MA160	AMA160TX****
ICs			
IC 301		OSD UPD6145G-624-T1	QSMEA0RNE001
IC 302		CXA1201Q	GCXA1201Q***
IC 331		Switching Regulator FA7612N-TE1	GFA7612NTE10
IC 351		Delay CXL1501M	QSMLA0TSN002
IC 352		CXA1200BQ	GCXA1200BQ**
IC 452		CX20037A	GCX20037A***
Coils			
L 301		Inductor 100μH J or Lead Inductor 100μH J	1170982T LLAXJBVFS101
L 331		Power Inductor RCH-875 10μH	LLBD00PSF004
L 332		Power Inductor RCR-875D 22μH	LLBD00PSF006
L 334		RCH-664 or Inductor 56μH	117D806 117B960
L 335		RCH-664 or Inductor 56μH	117D806 117B960
L 336		Inductor 100μH J or Lead Inductor 100μH J	1170982T LLAXJBVFS101
L 337		Inductor 33μH J or Lead Inductor 33μH J	1170976T LLAXJBVFS330
L 338		Inductor 33μH J or Lead Inductor 33μH J	1170976T LLAXJBVFS330
L 351		Magnetic Shield Inductor 82μH K	LLARKETTE820
L 353		Chip Inductor 39μH J or Chip Inductor 39μH J 3225 or Chip Inductor 39μH J	1170737 LLACJE8FS390 1170751
L 354		Inductor 100μH J or Lead Inductor 100μH J	1170982T LLAXJBVFS101
L 356		Chip Inductor 22μH J or Chip Inductor 22μH J 3225 or Chip Inductor 22μH J	1170734 LLACJE8FS220 1170748
L 357		Chip Inductor 100μH J or Chip Inductor 100μH J 3225 or Chip Inductor 100μH J	1170742 LLACJE8FS101 1170756
L 358		Power Inductor RCH-664 10μH	LLBD00PSF035
L 451		Chip Inductor 220μH J or Chip Inductor 220μH J 3225 or Chip Inductor 220μH J	1170794 LLACJE8FS221 1170791
L 501		Chip Inductor 8.2μH J	5170010
L 503		Chip Inductor 120μH J or	1170743

Ref. No.		Description	Part No.
L 504		Chip Inductor 120μH J 3225 or Chip Inductor 120μH J	LLACJE8FS121 1170757
		Chip Inductor 220μH J or Chip Inductor 220μH J 3225 or	1170794 LLACJE8FS221
L 505		Chip Inductor 220μH J Inductor 100μH J or	1170791 1170982T
L 506		Lead Inductor 100μH J Chip Inductor 150μH J or	LLAXJBVFS101 1170792
		Chip Inductor 150μH J 3225 or Chip Inductor 150μH J	LLACJE8FS151 1170789
L 507		Chip Inductor 100μH J or Chip Inductor 100μH J 3225 or	1170742 LLACJE8FS101
		Chip Inductor 100μH J Inductor 100μH J or	1170756 1170982T
L 508		Lead Inductor 100μH J Inductor 4.7μH J	LLAXJBVFS101 1170966T
L 509		Inductor 470μH J or Lead Inductor 470μH J	1170990T LLAXJBVFS471
L 510		Inductor 330μH J or Lead Inductor 330μH J	1170988T LLAXJBVFS331
L 511		Inductor 39μH J or Lead Inductor 39μH J	1170977T LLAXJBVFS390
L 512		Inductor 330μH J or Lead Inductor 330μH J	1170988T LLAXJBVFS331
L 513		Inductor 180μH J or Lead Inductor 180μH J	1170985T LLAXJBVFS181
L 514		Magnetic Shield Inductor 33μH K Inductor 10μH J or	LLARKETTE330 1170970T
L 515		Lead Inductor 10μH J	LLAXJBVFS100
L 518			
Transistors			
Q 303		Chip 2SC4081(R) or Chip 2SC4081(S) or	QSC4081T106R QSC4081T106S
		Chip 2SC4211-6 or Chip 2SC4211-7	Q2SC42116TL0 Q2SC42117TL0
Q 305		Chip 2SA1576(R) or Chip 2SA1576(S) or	QSA1576T106R QSA1576T106S
		Chip 2SA1622-6 or Chip 2SA1622-7	Q2SA16226TL0 Q2SA16227TL0
Q 306		Chip 2SC4081(R) or Chip 2SC4081(S) or	QSC4081T106R QSC4081T106S
		Chip 2SC4211-6 or Chip 2SC4211-7	Q2SC42116TL0 Q2SC42117TL0
Q 310		Chip 2SC4099(N) or Chip 2SC4099(P)	QQ8N02SC4099 QQ8P02SC4099
Q 331		Chip 2SC4081(R) or Chip 2SC4081(S) or	QSC4081T106R QSC4081T106S
		Chip 2SC4211-6 or Chip 2SC4211-7	Q2SC42116TL0 Q2SC42117TL0
Q 332		Chip SAH02-V1	QSAH02V10000
Q 351		Chip 2SC4081(R) or Chip 2SC4081(S) or	QSC4081T106R QSC4081T106S
		Chip 2SC4211-6 or Chip 2SC4211-7	Q2SC42116TL0 Q2SC42117TL0
Q 353		Chip 2SC4081(R) or Chip 2SC4081(S) or	QSC4081T106R QSC4081T106S
		Chip 2SC4211-6 or Chip 2SC4211-7	Q2SC42116TL0 Q2SC42117TL0
Q 356		Chip 2SA1576(R) or Chip 2SA1576(S) or	QSA1576T106R QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0

Ref. No.	⚠	Description	Part No.
Q 357		Chip 2SA1622-7	Q2SA16227TL0
		Chip 2SC4098(AP) or	QC4098T106AP
		Chip 2SC4098(AQ) or	QC4098T106AQ
		Chip 2SC43994-TL or	QQ8402SC4399
		Chip 2SC43995-TL	QQ8502SC4399
Q 358		Chip 2SC4098(AP) or	QC4098T106AP
		Chip 2SC4098(AQ) or	QC4098T106AQ
		Chip 2SC43994-TL or	QQ8402SC4399
		Chip 2SC43995-TL	QQ8502SC4399
Q 359		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 360		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 361		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 362		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0
		Chip 2SA1622-7	Q2SA16227TL0
Q 453		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 454		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0
		Chip 2SA1622-7	Q2SA16227TL0
Q 455		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 456		Chip FET 2SK1332(2) or	Q2SK13322TL*
		Chip FET 2SK1332(3) or	Q2SK13323TL*
		Chip FET 2SK1332(4)	Q2SK13324TL*
Q 457		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S
		Chip 2SA1622-6 or	Q2SA16226TL0
		Chip 2SA1622-7	Q2SA16227TL0
Q 458		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 459		Chip 2SC4081(R) or	QSC4081T106R
		Chip 2SC4081(S) or	QSC4081T106S
		Chip 2SC4211-6 or	Q2SC42116TL0
		Chip 2SC4211-7	Q2SC42117TL0
Q 460		Chip FET 2SK94(X1) or	Q2SK94T1X1**
		Chip FET 2SK94(X2) or	Q2SK94T1X2**
		Chip FET 2SK94(X3) or	Q2SK94T1X3**
		Chip FET 2SK209(BL) or	QK209BLTE85L
		Chip FET 2SK209(GR) or	QK209GRTE85L
		Chip FET 2SK209(Y)	QSK209YTE85L
Q 501		Chip 2SA1576(R) or	QSA1576T106R
		Chip 2SA1576(S) or	QSA1576T106S

Ref. No.		Description	Part No.
Q 502		Chip 2SA1622-6 or Chip 2SA1622-7	Q2SA16226TL0 Q2SA16227TL0
Q 503		Chip 2SC4098(AP) or Chip 2SC4098(AQ) or Chip 2SC43994-TL or Chip 2SC43995-TL	QC4098T106AP QC4098T106AQ QQ8402SC4399 QQ8502SC4399
Q 504		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 505		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 506		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 507		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 508		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 509		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 510		Chip 2SC4098(AP) or Chip 2SC4098(AQ) or Chip 2SC43994-TL or Chip 2SC43995-TL	QC4098T106AP QC4098T106AQ QQ8402SC4399 QQ8502SC4399
Q 511		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 512		Chip 2SC4098(AP) or Chip 2SC4098(AQ) or Chip 2SC43994-TL or Chip 2SC43995-TL	QC4098T106AP QC4098T106AQ QQ8402SC4399 QQ8502SC4399
Q 513		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 514		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
QR 303		Chip Resistor. Built-In DTC124EU or Chip Resistor. Built-In 2SC4397-TL	QTC124EUT106 QQ8Z02SC4397
QR 310		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 331		Chip DTA144EU or Chip Resistor. Built-In 2SA1676-TL	QTA144EUT106 Q2SA1676TL00

Ref. No.		Description	Part No.
QR 332		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 351		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 352		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 451		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 501		Chip DTC144EU or Chip Resistor. Built-In 2SC4396-TL	QTC144EUT106 Q2SC4396TL00
QR 535		Chip IMH2	QIMH2T110***
Resistors			
R 301		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 302		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 303		Chip 1/16W J 4.3K Ω	RCXGJR8Z0432
R 304		Chip 1/16W J 2.4K Ω	RCXGJR8Z0242
R 306		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 315		Chip 1/16W J 3.9K Ω	RCXGJR8Z0392
R 317		Chip 1/10W J 47 Ω	134F470C
R 318		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 319		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 320		Chip 1/16W J 1.2K Ω	RCXGJR8Z0122
R 321		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 322		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 323		Chip 1/16W F 100K Ω	RCXGFR8Z0104
R 324		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 325		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 327		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 328		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 329		Chip 1/10W J 560 Ω	134F561C
R 330		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 331		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 332		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 333		Chip 1/16W J 100 Ω	RCXGJR8Z0101
R 334		Chip 1/16W J 330K Ω	RCXGJR8Z0334
R 335		Chip 1/16W J 16K Ω	RCXGJR8Z0163
R 336		Chip 1/16W J 180K Ω	RCXGJR8Z0184
R 339		Chip 1/16W J 220 Ω	RCXGJR8Z0221
R 345		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 346		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 347		Chip 1/16W J 120 Ω	RCXGJR8Z0121
R 348		Chip 1/16W J 82K Ω	RCXGJR8Z0823
R 349		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 350		Chip 1/16W J 120 Ω	RCXGJR8Z0121
R 351		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 352		Chip 1/16W J 120 Ω	RCXGJR8Z0121
R 353		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 354		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 355		Chip 1/16W J 1.2K Ω	RCXGJR8Z0122
R 356		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 357		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 358		Chip 1/16W J 680K Ω	RCXGJR8Z0684
R 359		Chip 1/16W J 68K Ω	RCXGJR8Z0683
R 360		Chip 1/16W G 3.3K Ω	RCXGGR8Z0332
R 361		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 362		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 363		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 365		Chip 1/16W J 1.8K Ω	RCXGJR8Z0182
R 366		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 367		Chip 1/16W J 22K Ω	RCXGJR8Z0223

Ref. No.		Description	Part No.
R 368		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 369		Chip 1/16W J 5.6K Ω	RCXGJR8Z0562
R 370		Chip 1/16W G 1K Ω	RCXGGR8Z0102
R 371		Chip 1/16W G 470 Ω	RCXGGR8Z0471
R 372		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 373		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 374		Chip 1/16W J 1.2K Ω	RCXGJR8Z0122
R 375		Chip 1/16W J 680 Ω	RCXGJR8Z0681
R 376		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 377		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 378		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 379		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 380		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 381		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 382		Chip 1/16W J 680 Ω	RCXGJR8Z0681
R 383		Chip 1/16W J 3.9K Ω	RCXGJR8Z0392
R 384		Chip 1/16W J 680 Ω	RCXGJR8Z0681
R 385		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 386		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 387		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 388		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 389		Chip 1/16W J 470K Ω	RCXGJR8Z0474
R 390		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 391		Chip 1/16W J 2.4K Ω	RCXGJR8Z0242
R 392		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 393		Chip 1/16W J 3.9K Ω	RCXGJR8Z0392
R 394		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 395		Chip 1/16W J 8.2K Ω	RCXGJR8Z0822
R 396		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 397		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 398		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 400		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 401		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 402		Chip 1/16W J 3.9K Ω	RCXGJR8Z0392
R 403		Chip 1/16W J 5.6K Ω	RCXGJR8Z0562
R 405		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 406		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 407		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 408		Chip 1/16W J 820 Ω	RCXGJR8Z0821
R 409		Chip 1/16W J 820 Ω	RCXGJR8Z0821
R 410		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 411		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 415		Chip 1/16W J 39K Ω	RCXGJR8Z0393
R 426		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 427		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 428		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 429		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 430		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 431		Chip 1/16W J 680 Ω	RCXGJR8Z0681
R 432		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 434		Chip 1/16W J 12K Ω	RCXGJR8Z0123
R 435		Chip 1/16W J 8.2K Ω	RCXGJR8Z0822
R 436		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 437		Chip 1/16W J 270 Ω	RCXGJR8Z0271
R 438		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 439		Chip 1/16W J 120 Ω	RCXGJR8Z0121
R 440		Chip 1/16W J 1.2K Ω	RCXGJR8Z0122
R 441		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 442		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 443		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222

Ref. No.		Description	Part No.
R 444		Chip 1/16W J 68K Ω	RCXGJR8Z0683
R 445		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 446		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 447		Chip 1/16W F 820 Ω	RCXGFR8Z0821
R 448		Chip 1/16W G 820 Ω	RCXGGR8Z0821
R 449		Chip 1/16W J 8.2K Ω	RCXGJR8Z0822
R 450		Chip 1/16W J 330K Ω	RCXGJR8Z0334
R 451		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 452		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 453		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 454		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 455		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 456		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 457		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 458		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 459		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 460		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 461		Chip 1/16W J 15K Ω	RCXGJR8Z0153
R 462		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 463		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 464		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 465		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 466		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 467		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 468		Chip 1/16W J 15K Ω	RCXGJR8Z0153
R 469		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 470		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 471		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 475		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 476		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 477		Chip 1/16W J 220 Ω	RCXGJR8Z0221
R 478		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 479		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 481		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 484		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 485		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 486		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 487		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 488		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 489		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 490		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 491		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 492		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 493		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 494		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 495		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 496		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 497		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 498		Chip 1/16W J 820 Ω	RCXGJR8Z0821
R 499		Chip 1/16W J 330 Ω	RCXGJR8Z0331
R 500		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 501		Chip 1/16W J 680 Ω	RCXGJR8Z0681
R 502		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 503		Chip 1/16W J 220 Ω	RCXGJR8Z0221
R 504		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 505		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 506		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 507		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 508		Chip 1/16W J 820 Ω	RCXGJR8Z0821
R 509		Chip 1/16W J 68 Ω	RCXGJR8Z0680

Ref. No.		Description	Part No.
R 510		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 511		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 512		Chip 1/16W J 1.8K Ω	RCXGJR8Z0182
R 513		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 514		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 515		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 516		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 517		Chip 1/16W J 220 Ω	RCXGJR8Z0221
R 518		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 519		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 520		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 523		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 524		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 525		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 526		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 527		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 528		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 531		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 534		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 535		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 536		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 537		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 538		Chip 1/16W J 39 Ω	RCXGJR8Z0390
R 539		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 541		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 542		Chip 1/16W J 39 Ω	RCXGJR8Z0390
R 543		Chip 1/10W J 75 Ω	134F750C
R 544		Chip 1/16W J 2.7K Ω	RCXGJR8Z0272
R 545		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 546		Chip 1/16W J 240 Ω	RCXGJR8Z0241
R 547		Chip 1/16W J 240 Ω	RCXGJR8Z0241
R 548		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 549		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 550		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 553		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 554		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 555		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 565		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 568		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 569		Chip 1/16W J 18K Ω	RCXGJR8Z0183
R 570		Chip 1/16W J 150K Ω	RCXGJR8Z0154
Filters			
T 351		Chip 5.066MHz	FAE505CMM001
T 352		Chip 3.58MHz	FAB355CMM001
T 451		Chip 1.5MHz BPF or Chip 1.5MHz BPF	FAB155CMM001 FAB155CSF002
Variable Resistors			
VR 301		Chip P.O.T. 50K Ω B X	238N269C
VR 331		Chip P.O.T. 1K Ω B X	238N264C
VR 332		Chip P.O.T. 10K Ω B X	238N267C
VR 351		Chip P.O.T. 10K Ω B X	238N267C
VR 352		Chip P.O.T. 50K Ω B X	238N269C
VR 353		Chip P.O.T. 1K Ω B X	238N264C
VR 354		Chip P.O.T. 2K Ω B X	238N265C
VR 355		Chip P.O.T. 5K Ω B X	238N266C
VR 356		Chip P.O.T. 2K Ω B X	238N265C
VR 451		Chip P.O.T. 2K Ω B X	238N265C
VR 452		Chip P.O.T. 10K Ω B X	238N267C
VR 453		Chip P.O.T. 20K Ω B X	238N268C
VR 501		Chip P.O.T. 2K Ω B X	238N265C

Ref. No.		Description	Part No.
VR 502		Chip P.O.T. 500 Ω B X	238N263C
VR 525		Chip P.O.T. 10K Ω B X	238N267C
VR 526		Chip P.O.T. 50K Ω B X	238N269C
Miscellaneous			
CF 301		Chip Filter 5.2MHz Trap	FAE525CTE001
CF 302		Ceramic Filter 4.32MHz	FBB435PMR001
CP 332		IC Protector ICP-F25	179F842
TP 355		Checker Chip 2.0-1.25	170A354C
TP 504		Checker Chip 2.0-1.25	170A354C
TP 505		Checker Chip 2.0-1.25	170A354C
TP 506		Checker Chip 2.0-1.25	170A354C
X 351		Crystal Oscillator 3.58MHz	FX0355LDS001
		PCB C2580/MAIN	BC2580G02001

VCR Servo/System Control

Ref. No.		Description	Part No.
		VCR Servo/System Control CBA Consists of the following:	0VSA04971
Capacitors			
C 572		Electrolytic 10 μ F/16V M H7	526T106V
C 574		Electrolytic 10 μ F/16V M H7	526T106V
C 576		Electrolytic 100 μ F/10V M H7	526S107V
C 577		Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125 or Chip Ceramic 1 μ F/16V F 2125	CA1C010KC001 CA1C010MR002 CA1C010TU003
C 578		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1CZ80Z104
C 579		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 582		Electrolytic 47 μ F/16V M H5	121T476V
C 583		Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V or Chip Ceramic F Z 0.01 μ F/50V or Chip Ceramic F Z 0.01 μ F/25V	CHD1JZ80F103 CHD1EZ80F103 CHD1JZ80Z103 CHD1EZ80Z103
C 584		Electrolytic 2.2 μ F/50V NP H=5	CA1J2R2NC002
C 586		Electrolytic 3.3 μ F/25V M H5 or Electrolytic 3.3 μ F/50V M H5	121U335V 121W335V
C 588		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 590		Chip Ceramic B K 0.01 μ F/50V or Chip Ceramic B K 0.01 μ F/25V or Chip Ceramic B K 0.01 μ F/50V or Chip Ceramic B K 0.01 μ F/25V	CHD1JK80B103 CHD1EK80B103 CHD1JK80X103 CHD1EK80X103
C 595		OS 4.7 μ F/10V M	CA1A4R7SY001
C 600		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 601		Electrolytic 100 μ F/6.3V M H7	526R107V
C 602		Chip Ceramic F Z 0.1 μ F/16V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/25V or Chip Ceramic F Z 0.1 μ F/16V	CHD1CZ80F104 CHD1EZ80F104 CHD1EZ80Z104 CHD1CZ80Z104
C 603		Chip Ceramic F Z 0.1 μ F/16V or	CHD1CZ80F104

Ref. No.		Description	Part No.
C 605		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic CH D 10pF/50V or	CHD1JD8CH100
		Chip Ceramic CG D 10pF/50V or	CHD1JD8CG100
C 606		Chip Ceramic CG C 10pF/50V	CHD1JC8CG100
		Chip Ceramic CH D 10pF/50V or	CHD1JD8CH100
		Chip Ceramic CG D 10pF/50V or	CHD1JD8CG100
C 607		Chip Ceramic CG C 10pF/50V	CHD1JC8CG100
		Chip Ceramic B K 1000pF/50V or	CHD1JK80B102
		Chip Ceramic B K 1000pF/25V or	CHD1EK80B102
		Chip Ceramic B K 1000pF/50V or	CHD1JK80X102
C 608		Chip Ceramic B K 1000pF/25V	CHD1EK80X102
		Chip Ceramic CH J 12pF/50V or	CHD1JJ8CH120
		Chip Ceramic CG J 12pF/50V	CHD1JJ8CG120
C 609		Chip Ceramic CH J 12pF/50V or	CHD1JJ8CH120
		Chip Ceramic CG J 12pF/50V	CHD1JJ8CG120
C 610		Chip Tantal 1μF/16V M or	1225105C
C 611		Chip Tantal 1μF/16V M	CA1C105KC003
		Chip Ceramic B K 1000pF/50V or	CHD1JK80B102
		Chip Ceramic B K 1000pF/25V or	CHD1EK80B102
		Chip Ceramic B K 1000pF/50V or	CHD1JK80X102
C 612		Chip Ceramic B K 1000pF/25V	CHD1EK80X102
		Chip Ceramic B K 0.1μF/50V or	12B3104C
		Chip Ceramic B K 0.1μF/25V or	12B2104C
		Chip Ceramic B K 0.1μF/16V	CA1C104RM001
C 614		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic B K 0.1μF/50V or	12B3104C
C 615		Chip Ceramic B K 0.1μF/25V or	12B2104C
		Chip Ceramic B K 0.1μF/16V	CA1C104RM001
		Chip Ceramic X7S 0.56μF/16V 3216	CA1C564TE001
C 616		Chip Ceramic SL J 100pF/50V	CHD1JJ8SL101
C 622		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip 1/16W J 0 Ω	RCXGJR8Z0000
C 631		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
C 633		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
C 640		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Tantal 10μF/6.3V M or	1223106C
		Chip Tantal 10μF/6.3V M	CA0K106KC003
C 702		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 703		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 705		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104

Ref. No.		Description	Part No.
C 706		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic B K 0.047μF/50V or	12B3473C
C 707		Chip Ceramic B K 0.047μF/25V	12B2473C
C 708		Chip Ceramic B K 0.039μF/50V	12B3393C
C 709		Chip Ceramic SL J 470pF/50V	CHD1JJ8SL471
C 710		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
C 711		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic B K 2700pF/50V or	CHD1JK80B272
		Chip Ceramic B K 2700pF/50V or	CHD1JK80X272
C 712		Chip Ceramic B K 2700pF/25V	CHD1EK80X272
		Chip Ceramic B K 2200pF/50V or	CHD1JK80B222
		Chip Ceramic B K 2200pF/25V or	CHD1EK80B222
C 713		Chip Ceramic B K 2200pF/50V or	CHD1JK80X222
		Chip Ceramic B K 2200pF/25V	CHD1EK80X222
		Chip Ceramic SL J 220pF/50V	CHD1JJ8SL221
C 714		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
C 715		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
		Chip Ceramic B K 4700pF/50V or	CHD1JK80B472
		Chip Ceramic B K 4700pF/25V or	CHD1EK80B472
C 716		Chip Ceramic B K 4700pF/50V or	CHD1JK80X472
		Chip Ceramic B K 4700pF/25V	CHD1EK80X472
		Chip Ceramic B K 3300pF/50V or	CHD1JK80B332
C 717		Chip Ceramic B K 3300pF/25V or	CHD1EK80B332
		Chip Ceramic B K 3300pF/50V or	CHD1JK80X332
		Chip Ceramic B K 3300pF/25V	CHD1EK80X332
C 718		Chip Ceramic SL J 330pF/50V	CHD1JJ8SL331
C 719		Chip Ceramic F Z 0.047μF/50V or	CHD1JZ80F473
		Chip Ceramic F Z 0.047μF/25V or	CHD1EZ80F473
		Chip Ceramic F Z 0.047μF/16V or	CHD1CZ80F473
C 720		Chip Ceramic F Z 0.047μF/25V or	CHD1EZ80Z473
		Chip Ceramic F Z 0.047μF/16V	CHD1CZ80Z473
		Chip Ceramic SL J 22pF/50V	CHD1JJ8SL220
C 721		Chip Ceramic B K 1500pF/50V or	CHD1JK80B152
		Chip Ceramic B K 1500pF/25V or	CHD1EK80B152
		Chip Ceramic B K 1500pF/50V or	CHD1JK80X152
C 722		Chip Ceramic B K 1500pF/25V	CHD1EK80X152
		Chip Ceramic SL J 56pF/50V	CHD1JJ8SL560
		Chip Ceramic B K 1000pF/50V or	CHD1JK80B102
C 723		Chip Ceramic B K 1000pF/25V or	CHD1EK80B102
		Chip Ceramic B K 1000pF/50V or	CHD1JK80X102
		Chip Ceramic B K 1000pF/25V	CHD1EK80X102
C 724		Chip Ceramic SL J 560pF/50V	CHD1JJ8SL561
C 725		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
C 726		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
		Chip Ceramic SL J 0.001μF/50V	1270102C
		Chip Ceramic SL J 0.001μF/50V	1270102C
C 727		Chip Ceramic B K 0.022μF/25V or	CHD1EK80B223
		Chip Ceramic B K 0.022μF/25V or	CHD1EK80X223
		Chip Ceramic B K 0.022μF/16V	CHD1CK80X223
C 728		Chip Ceramic B K 0.022μF/25V or	CHD1EK80B223
		Chip Ceramic B K 0.022μF/25V or	CHD1EK80X223
		Chip Ceramic B K 0.022μF/16V	CHD1CK80X223
C 729		Ceramic F Z 0.047μF/50V	12F3473

Ref. No.	△	Description	Part No.
C 731		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 732		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 733		Electrolytic 100μF/6.3V M H7	526R107V
C 734		Chip Ceramic CH J 33pF/50V or	CHD1JJ8CH330
		Chip Ceramic CG J 33pF/50V	CHD1JJ8CG330
C 735		Chip Ceramic CH J 33pF/50V or	CHD1JJ8CH330
		Chip Ceramic CG J 33pF/50V	CHD1JJ8CG330
C 737		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 738		Electrolytic 22μF/6.3V M H7	526R226V
C 739		Chip Tantalum 22μF/6.3V M or	1223226C
		Chip Tantalum 22μF/6.3V M	CA0K226KC003
C 740		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 741		Electrolytic 100μF/6.3V M H7	526R107V
C 742		Chip Ceramic F Z 0.022μF/50V or	CHD1JZ80F223
		Chip Ceramic F Z 0.022μF/25V or	CHD1EZ80F223
		Chip Ceramic F Z 0.022μF/50V or	CHD1JZ80Z223
		Chip Ceramic F Z 0.022μF/25V	CHD1EZ80Z223
C 743		Chip Ceramic B K 0.047μF/50V or	12B3473C
		Chip Ceramic B K 0.047μF/25V	12B2473C
C 744		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 745		Chip Ceramic B K 0.047μF/50V or	12B3473C
		Chip Ceramic B K 0.047μF/25V	12B2473C
C 746		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 747		Chip Ceramic F Z 0.22μF/25V or	12F2224C
		Chip Ceramic F Z 0.22μF/25V	CA1E224RM002
C 750		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 752		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
C 753		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
C 754		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 755		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104

Ref. No.		Description	Part No.
C 756		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Tantalum 15μF/6.3V M or	1223156C
C 757		Chip Tantalum 15μF/6.3V M	CA0K156KC003
		Chip Tantalum 10μF/6.3V M or	1223106C
C 758		Chip Tantalum 10μF/6.3V M	CA0K106KC003
		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
C 759		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
		Chip Ceramic B K 0.1μF/50V or	12B3104C
		Chip Ceramic B K 0.1μF/25V or	12B2104C
		Chip Ceramic B K 0.1μF/16V	CA1C104RM001
C 760		Chip Ceramic 1μF/16V F 2125 or	CA1C010KC001
		Chip Ceramic 1μF/16V F 2125 or	CA1C010MR002
		Chip Ceramic 1μF/16V F 2125	CA1C010TU003
C 761		Chip Ceramic 1μF/16V F 2125 or	CA1C010KC001
		Chip Ceramic 1μF/16V F 2125 or	CA1C010MR002
		Chip Ceramic 1μF/16V F 2125	CA1C010TU003
C 763		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
C 764		Chip Ceramic B K 0.1μF/50V or	12B3104C
		Chip Ceramic B K 0.1μF/25V or	12B2104C
		Chip Ceramic B K 0.1μF/16V	CA1C104RM001
		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
C 765		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic B K 1500pF/50V or	CHD1JK80B152
C 766		Chip Ceramic B K 1500pF/25V or	CHD1EK80B152
		Chip Ceramic B K 1500pF/50V or	CHD1JK80X152
		Chip Ceramic B K 1500pF/25V	CHD1EK80X152
		Chip Tantalum 15μF/6.3V M or	1223156C
C 767		Chip Tantalum 15μF/6.3V M	CA0K156KC003
		Chip Ceramic F Z 0.047μF/50V or	CHD1JZ80F473
C 768		Chip Ceramic F Z 0.047μF/25V or	CHD1EZ80F473
		Chip Ceramic F Z 0.047μF/16V or	CHD1CZ80F473
		Chip Ceramic F Z 0.047μF/25V or	CHD1EZ80Z473
		Chip Ceramic F Z 0.047μF/16V	CHD1CZ80Z473
C 769		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
C 770		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 771		Chip Ceramic B K 0.047μF/50V or	12B3473C
		Chip Ceramic B K 0.047μF/25V	12B2473C
C 772		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 773		Chip Tantalum 1μF/16V M or	1225105C
		Chip Tantalum 1μF/16V M	CA1C105KC003
C 774		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104

Ref. No.		Description	Part No.
C 775		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 776		Chip Ceramic B K 0.047μF/50V or	12B3473C
		Chip Ceramic B K 0.047μF/25V	12B2473C
C 777		Chip Tantalum 10μF/6.3V M or	1223106C
		Chip Tantalum 10μF/6.3V M	CA0K106KC003
C 778		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
C 779		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
C 780		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
C 781		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
C 782		Chip Ceramic B K 0.047μF/50V or	12B3473C
		Chip Ceramic B K 0.047μF/25V	12B2473C
C 783		Chip Ceramic B K 0.01μF/50V or	CHD1JK80B103
		Chip Ceramic B K 0.01μF/25V or	CHD1EK80B103
C 785		Chip Ceramic B K 0.01μF/50V or	CHD1JK80X103
		Chip Ceramic B K 0.01μF/25V	CHD1EK80X103
C 786		Chip Ceramic SI J 47pF/50V	CHD1JJ8SL470
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80F103
C 787		Chip Ceramic F Z 0.01μF/25V or	CHD1EZ80F103
		Chip Ceramic F Z 0.01μF/50V or	CHD1JZ80Z103
C 788		Chip Ceramic F Z 0.01μF/25V	CHD1EZ80Z103
		Chip Ceramic B K 1000pF/50V or	CHD1JK80B102
C 790		Chip Ceramic B K 1000pF/25V or	CHD1EK80B102
		Chip Ceramic B K 1000pF/50V or	CHD1JK80X102
C 792		Chip Ceramic B K 1000pF/25V	CHD1EK80X102
		Chip Ceramic SI J 100pF/50V	CHD1JJ8SL101
C 792		Chip Ceramic SI J 100pF/50V	CHD1JJ8SL101
		Chip Ceramic SI J 150pF/50V	CHD1JJ8SL151
C 792		Chip Ceramic B K 0.027μF/25V or	CHD1EK80X273
		Chip Ceramic B K 0.027μF/16V	CHD1CK80X273
C 792		Chip Ceramic 1μF/16V F 2125 or	CA1C010KC001
		Chip Ceramic 1μF/16V F 2125 or	CA1C010MR002
C 792		Chip Ceramic 1μF/16V F 2125	CA1C010TU003
		Chip Ceramic F Z 0.1μF/16V or	CHD1CZ80F104
C 792		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80F104
		Chip Ceramic F Z 0.1μF/25V or	CHD1EZ80Z104
C 792		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
		Chip Ceramic F Z 0.1μF/16V	CHD1CZ80Z104
Connectors			
CN- 6		B to B 12P POST 4-176833-2	JC33A12APH0C
CN- 7		B to B 18P POST 4-176833-8	JC33A18APH0C
CN- 8		B to B 18P POST 4-176833-8	JC33A18APH0C
CN- 9		B to B 12P POST 4-176833-2	JC33A12APH0C
CN- 13		IL-Z-06PL-SMTY	JCILD06NBH0C
CN- 14		IL-Z-04PL-SMTY	JCILD04NBH0C
CN- 15		FPC 8P IL-402- 8S-S1L-SA	JC42T08NBH0B
CN- 16		FPC 14P IL-402-14S-S1L-SA	JC42T14NBH0B
CN- 17		FPC 12P IL-402-12S-S1L-SA	JC42T12NBH0B
Diodes			
D 575		Chip DA115	ADA115T106**
D 576		Chip DA115	ADA115T106**
D 577		Chip DA115	ADA115T106**
D 580		Chip DA115	ADA115T106**
D 581		Chip Zener RD5.6M(B2)	ARD5R6MT1B2*
ICs			
IC 571		S-8420BF-T1	GS8420BFT100
IC 573		Reset S-80745AN-D9-T1	G80745AND9T1

Ref. No.		Description	Part No.
IC 574		TA7291F	GTA7291FER**
IC 590		L-MOS Logic TC4W53F TE12L	QSMQA0TTS009
IC 601		Microcontroller 8BIT CXP80116	QSMQB0RSN010
IC 602		High Speed CMOS Logic Ic BU2007F-T1	GBU2007FT100
IC 603		UPC358G2(T1) or BA10358F-T1 or NJM2904M(T1)	GUPC358G2T1* GBA10358FT1* GNJM2904MT1*
IC 604		Microcontroller 4BIT UPD75004GB-800-3B4	QSMQA0RNE011
IC 605		UPC358G2(T1) or BA10358F-T1 or NJM2904M(T1)	GUPC358G2T1* GBA10358FT1* GNJM2904MT1*
IC 701		CXA1204Q	GCXA1204Q***
IC 702		(COMPARATER) BA10393F(T1) or (OP-AMP) NJM2903M-T1	GBA10393FT1* GNJM2903MT10
IC 703		CXA1202Q-Z	GCXA1202QZ**
Coils			
L 571		Inductor 22μH J or Lead Inductor 22μH J	1170974T LLAXJBVFS220
L 601		Inductor 22μH J or Lead Inductor 22μH J	1170974T LLAXJBVFS220
L 602		Inductor 22μH J or Lead Inductor 22μH J	1170974T LLAXJBVFS220
L 603		Inductor 22μH J or Lead Inductor 22μH J	1170974T LLAXJBVFS220
L 605		Inductor 22μH J or Lead Inductor 22μH J	1170974T LLAXJBVFS220
L 701		Inductor 330μH J or Lead Inductor 330μH J	1170988T LLAXJBVFS331
L 702		Inductor 220μH J or Lead Inductor 220μH J	1170986T LLAXJBVFS221
L 703		Chip Inductor 10μH J or Chip Inductor 10μH K	1170810 1170861
L 704		Chip Inductor 100μH J or Chip Inductor 100μH J or Chip Inductor 100μH J 3225	1170742 1170756 LLACJE8FS101
L 705		Chip Inductor 150μH J or Chip Inductor 150μH J or Chip Inductor 150μH J 3225	1170792 1170789 LLACJE8FS151
L 706		Chip Inductor 150μH J or Chip Inductor 150μH J or Chip Inductor 150μH J 3225	1170792 1170789 LLACJE8FS151
L 707		Chip 1/10W J 0 Ω	134F000C
Transistors			
Q 601		Chip Transistor 2SC4081(R) or Chip Transistor 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 602		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 701		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 702		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 703		Chip 2SA1576(R) or	QSA1576T106R

Ref. No.		Description	Part No.
Q 704		Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 705		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 706		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 707		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 710		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
Q 751		Chip 2SA1576(R) or Chip 2SA1576(S) or Chip 2SA1622-6 or Chip 2SA1622-7	QSA1576T106R QSA1576T106S Q2SA16226TL0 Q2SA16227TL0
Q 752		Chip 2SA1577(R) or Chip 2SA1745-6-TL	QSA1577T106R QQ8602SA1745
Q 753		Chip 2SA1577(R) or Chip 2SA1745-6-TL	QSA1577T106R QQ8602SA1745
QR 604		Chip 2SC4081(R) or Chip 2SC4081(S) or Chip 2SC4211-6 or Chip 2SC4211-7	QSC4081T106R QSC4081T106S Q2SC42116TL0 Q2SC42117TL0
QR 605		Chip DTA144EU or Chip Resistor Built-In 2SA1676-TL	QTA144EUT106 Q2SA1676TL00
QR 607		Chip Resistor Built-In IMH14	QIMH14T10800
QR 751		Chip Resistor Built-In IMD1	QIMD1T108000
QR 752		Chip DTC144EU or Chip Resistor Built-In 2SC4396-TL Chip DTA144EU or Chip Resistor Built-In 2SA1676-TL	QTC144EUT106 Q2SC4396TL00 QTA144EUT106 Q2SA1676TL00
Resistors			
R 574		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 575		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 581		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 583		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 584		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 589		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 590		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 591		Chip 1/16W J 1.5M Ω	RCXGJR8Z0155
R 592		Chip 1/16W J 15K Ω	RCXGJR8Z0153
R 593		Chip 1/16W J 820 Ω	RCXGJR8Z0821
R 594		Chip 1/16W J 390 Ω	RCXGJR8Z0391
R 595		Chip 1/16W J 430 Ω	RCXGJR8Z0431
R 596		Chip 1/16W J 56K Ω	RCXGJR8Z0563
R 597		Chip 1/16W J 39K Ω	RCXGJR8Z0393
R 598		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 599		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 600		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 601		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 602		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 603		Chip 1/16W J 1K Ω	RCXGJR8Z0102

Ref. No.		Description	Part No.
R 604		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 605		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 606		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 607		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 608		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 609		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 610		Chip 1/16W J 100 Ω	RCXGJR8Z0101
R 611		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 612		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 613		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 614		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 615		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 616		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 617		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 618		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 619		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 620		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 621		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 622		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 624		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 625		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 626		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 627		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 628		Chip 1/16W J 15K Ω	RCXGJR8Z0153
R 629		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 630		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 631		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 632		Chip 1/16W G 47K Ω	RCXGGR8Z0473
R 634		Chip 1/16W J 220K Ω	RCXGJR8Z0224
R 635		Chip 1/16W J 39K Ω	RCXGJR8Z0393
R 636		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 637		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 638		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 640		Chip 1/16W J 150K Ω	RCXGJR8Z0154
R 641		Chip 1/10W J 10M Ω	RMAX106RM001
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R 662		Chip 1/16W J 100K Ω	RCXGJR8Z0104
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R 667		Chip 1/16W J 1K Ω	RCXGJR8Z0102
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R 670		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 672		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 674		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 675		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 676		Chip 1/16W J 1K Ω	RCXGJR8Z0102

Ref. No.		Description	Part No.
R 677		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 678		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 682		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 683		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 684		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 685		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 687		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 688		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 693		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 694		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 695		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 696		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 697		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 699		Chip 1/16W J 0 Ω	RCXGJR8Z0000
R 701		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 702		Chip 1/16W J 330K Ω	RCXGJR8Z0334
R 703		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 704		Chip 1/16W J 680K Ω	RCXGJR8Z0684
R 705		Chip 1/16W J 150K Ω	RCXGJR8Z0154
R 706		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 707		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 709		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 710		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 711		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 712		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 713		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 714		Chip 1/16W J 220K Ω	RCXGJR8Z0224
R 715		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 716		Chip 1/16W J 33 Ω	RCXGJR8Z0330
R 717		Chip 1/16W J 180 Ω	RCXGJR8Z0181
R 718		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 719		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 720		Chip 1/16W J 33K Ω	RCXGJR8Z0333
R 721		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 722		Chip 1/16W J 560 Ω	RCXGJR8Z0561
R 723		Chip 1/16W J 120 Ω	RCXGJR8Z0121
R 724		Chip 1/16W J 180 Ω	RCXGJR8Z0181
R 725		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 726		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 727		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 729		Chip 1/16W J 4.7K Ω	RCXGJR8Z0472
R 730		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 731		Chip 1/16W J 3.3K Ω	RCXGJR8Z0332
R 732		Chip 1/16W J 56K Ω	RCXGJR8Z0563
R 733		Chip 1/16W J 6.8K Ω	RCXGJR8Z0682
R 734		Chip 1/16W J 8.2K Ω	RCXGJR8Z0822
R 735		Chip 1/16W J 680K Ω	RCXGJR8Z0684
R 736		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 737		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 738		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 739		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 740		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 741		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 742		Chip 1/16W J 1.2K Ω	RCXGJR8Z0122
R 743		Chip 1/16W J 1M Ω	RCXGJR8Z0105
R 744		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 746		Chip 1/16W J 100K Ω	RCXGJR8Z0104
R 747		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 748		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 749		Chip 1/16W J 39K Ω	RCXGJR8Z0393

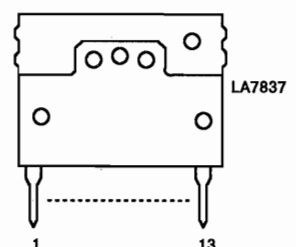
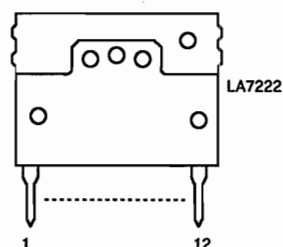
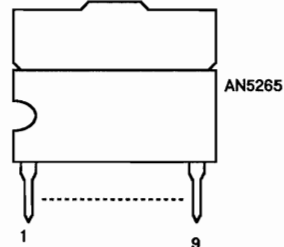
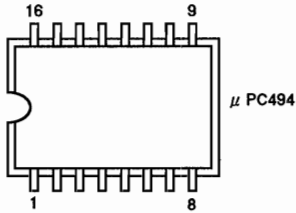
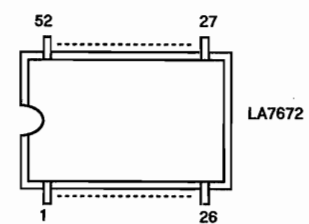
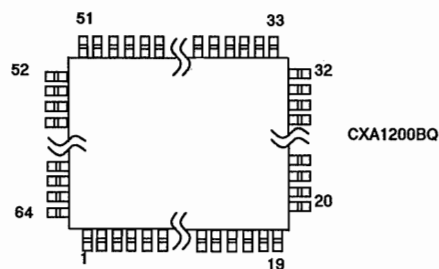
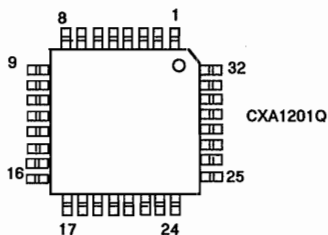
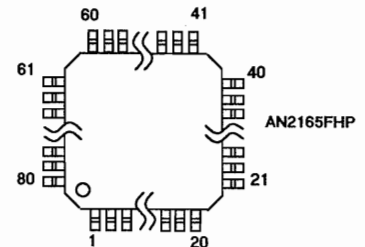
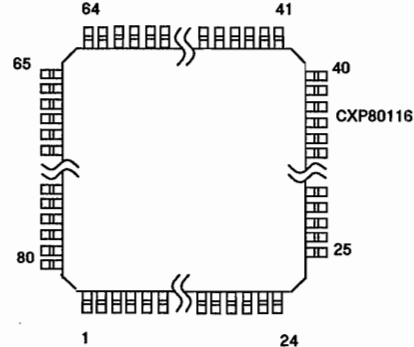
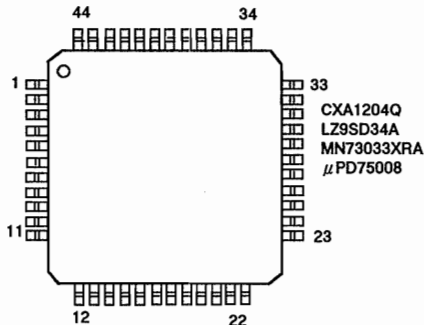
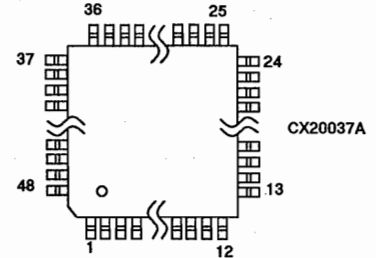
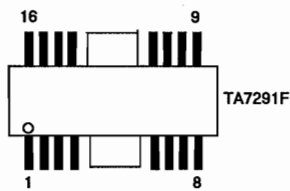
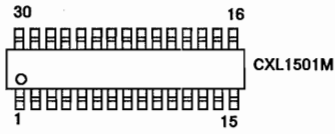
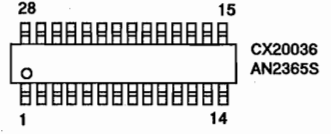
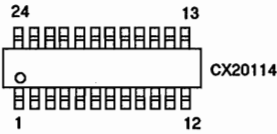
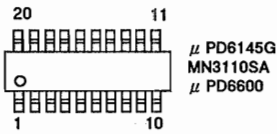
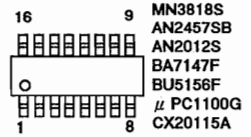
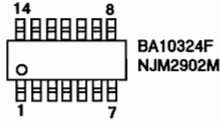
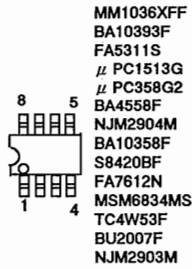
Ref. No.		Description	Part No.
R 751		Chip 1/16W J 10K Ω	RCXGJR8Z0103
R 752		Chip 1/16W J 150K Ω	RCXGJR8Z0154
R 753		Chip 1/16W J 150K Ω	RCXGJR8Z0154
R 754		Chip 1/16W J 56K Ω	RCXGJR8Z0563
R 755		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 756		Chip 1/16W J 2K Ω	RCXGJR8Z0202
R 757		Chip 1/16W J 470 Ω	RCXGJR8Z0471
R 758		Chip 1/16W J 1K Ω	RCXGJR8Z0102
R 759		Chip 1/16W J 6.2K Ω	RCXGJR8Z0622
R 760		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 761		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 762		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 763		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 764		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 766		Chip 1/16W J 10 Ω	RCXGJR8Z0100
R 767		Chip 1/16W J 10 Ω	RCXGJR8Z0100
R 768		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 769		Chip 1/16W J 27K Ω	RCXGJR8Z0273
R 770		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 771		Chip 1/16W J 1.5K Ω	RCXGJR8Z0152
R 772		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 773		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 774		Chip 1/16W J 6.2K Ω	RCXGJR8Z0622
R 775		Chip 1/16W J 47K Ω	RCXGJR8Z0473
R 776		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 777		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 778		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 779		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 780		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 781		Chip 1/16W J 22K Ω	RCXGJR8Z0223
R 782		Chip 1/16W J 330 Ω	RCXGJR8Z0331
R 783		Chip 1/16W J 22 Ω	RCXGJR8Z0220
R 784		Chip 1/16W J 330 Ω	RCXGJR8Z0331
R 785		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 786		Chip 1/16W J 2.2K Ω	RCXGJR8Z0222
R 789		Chip 1/16W G 47K Ω	RCXGGR8Z0473
R 790		Chip 1/16W G 47K Ω	RCXGGR8Z0473
Miscellaneous			
W 20		Wire 060/GREY/AWG18#1015	WX3801CB3306
W 21		Wire 040/BLA/AWG26#1007	WX3001B63304
X 601		Crystal Oscillator 16.000 MHz	FXE166LFS001
X 602		Ceralock 4.19MHz or	1812885
		Ceramic Resonator KBR-4.19MKS	1813682
X 604		Crystal Oscillator 92.0kHz	FX0923LDS001
X 701		Crystal Oscillator 5.9475MHz	FX0595LFS001
		PCB C2580/SOFTWARE S/S	BC2580G02A02

CABINET PARTS LIST

Ref.No.		Description	Part No.
A1X		Top Cabinet Assembly	0EM200255X
		Consists of the following: Non-repairable	
(A1)		Top Cabinet	-----
(A9)		Push Knob A	-----
(A10)		Push Knob B	-----
(A11)		Push Knob C	-----
(A12)		Push Knob D	-----
(A14)		Push Knob F	-----
(A21)		Control Plate	-----
(A25)		LED Indicator	-----
(A28)		Sub Caution Label	-----
(B8)	⚠	Serviceman Warning Label	-----
(B13)	⚠	Anode Caution Label	-----
A8X		Handle Assembly	0EM300394X
		Consists of the following: Non-repairable	
(A6)		Handle Grip Top	-----
(A7)		Handle Grip Bottom	-----
(A8)		Handle	-----
(L13)		P-Tight Screw, Bind M3X8	-----
A2X		Bottom Cabinet Assembly	0EM100257X
		Consists of the following: Non-repairable	
(A2)		Bottom Cabinet	-----
(B14)	⚠	Service Caution Label	-----
(A22)	⚠	Rating Label	-----
(A27)		User Caution Label	-----
A20X		AC Adapter Bottom Assembly	0EM200198X
		Consists of the following: Non-repairable	
(A20)		AC Adapter Bottom	-----
(A23)	⚠	AC Rating Label	-----
(A29)		Serial No. Label	-----
A3		Front Panel	0EM100258
A4		Video Door	0EM300526
A5		Control Door	0EM300527
A13		Push Knob E	0EM300396
A15		CRT Cover	0EM300528
A16		Stand	0EM300383
A17		Door Window	0EM300398
A18		Terminal Plate	0EM300399
A19		AC Adapter Top	0EM200197
A24		Rod Antenna	0EM300428
B1		Cabinet Holder	0EM401074
B2		CRT Shield Band	0EM300413
B3		CRT Grand	0EM300414
B4		PCB Holder	0EM200206
B5		Antenna Metal	0EM401082
B6		Handle Spacer	-----
B7		Handle Shaft	-----
B9		Chassis No. Label (A) or	0EM401090
		Chassis No. Label (B) or	0EM401186
		Chassis No. Label (C) or	0EM401187

Ref.No.	⚠	Description	Part No.
B15		Chassis No. Label (D)	0EM401188
B16		FBT Holder	0EM401225
B18		Jack Holder	0EM401237
B20		Cloth (D)	0EM401293
		Door Cushion	0EM400106
L1		Screw P-Tight Bind, M3X10	GBMP3100
L2		Screw S-Tight Bind, M3X6	GBKS3060
L3		Screw P-Tight Flat Head, 3X12	GDKP3120
L4		Screw P-Tight Bind, M3X10	GBKP3100
L5		Screw P-Tight Flange, M4X12	GJMP4120
L6		Screw P-Tight Flat Head, M4X40	GDKP4400
L7		Screw B-Tight Bind, M3X8	GBMB308C
L8		Screw S-Tight Bind, M2.6X12	GBMS9120
L9		Screw Bind, M2X6	SBK32060
L10		Screw Bind, 3X8	SBK33080
L11		Screw S-Tight Flat, M2.6X6	GAKS9060
Accessories			
X1	⚠	Car Battery Cord	WPZ0202GA001
X2	⚠	Owner's Manual	0EMN00603
X3		Polyethylene Bag	Z325350

IC LEAD IDENTIFICATION



IC PIN FUNCTION DESCRIPTION

IC601 System Control CXP80116

Pin No	IN/OUT	Signal Name	Function
1	OUT	SEL2	AFT Select 2
2	OUT	SEL1	AFT Select 1
3	—	N.C	NO CONNECTION
4	OUT	A-MUTE	Audio Mute at "H"
5	OUT	SP-H	SP at "H"
6	—	N.C	NO CONNECTION
7	OUT	JOG	Cue, Review, Still at "H"
8	OUT	REC	REC at "L"
9	OUT	PB-H	PB Mode at "H"
10	OUT	LM-CTL	Loading Motor Power UP at "H"
11	OUT	LM-RVS	Loading Motor Reverse at "H"
12	OUT	LM-FWD	Loading Motor Forward at "H"
13	OUT	VTR-ON	VTR Power on at "H"
14	—	N.C	NO CONNECTION
15	—	N.C	NO CONNECTION
16	OUT	MO1	Key Scan Pulse 1
17	—	N.C	NO CONNECTION
18	OUT	MO 0	Key Scan Pulse
19	—	N.C	NO CONNECTION
20	IN	MI 0	Key Scan Data 0
21	IN	MI 1	Key Scan Data 1
22	IN	MI 2	Key Scan Data 2
23	IN	MI 3	Key Scan Data 3
24	—	NO USE	Vdd (+5V)
25	—	P SAVE	Power Save Mode at "L"
26	—	S/E LED	Start, End LED on at "L"
27	—	N.C	NO CONNECTION
28	—	N.C	NO CONNECTION
29	OUT	REC LED	REC LED on at "L"
30	—	N.C	NO CONNECTION
31	—	NO USE	Always GROUND
32	IN	S-RST	System R
33	—	Vss	Always GROUND
34	—	XTAL	System Clock (16MHz)
35	—	EXTAL	System Clock (16MHz)
36	—	N.C	NO CONNECTION
37	IN	SI 0	Serial Input Data from Feature IC
38	OUT	SO 0	Serial Output Data for Feature IC
39	OUT	SCK 0	Serial Clock for Feature IC
40	—	N.C	Vdd (+5V)
41	—	N.C	Vdd (+5V)
42	OUT	SO 1	Serial Output Data for Video IC
43	OUT	NO USE	
44	IN	NO USE	

IC604 Feature Control μ PD75004

Pin No	IN/OUT	Signal Name	Function
1	—	REC SW	REC at "L"
2	—	AUTO PB	PB at "L"
3	—	NO USE	Always +5V
4	—	N.C	NO CONNECTION
5	—	N.C	NO CONNECTION
6	—	N.C	NO CONNECTION
7	—	N.C	NO CONNECTION
8	—	NO USE	Always GROUND
9	—	NO USE	Always GROUND
10	—	NO USE	Always GROUND
11	—	NO USE	Always GROUND
12	—	NO USE	Always +5V
13	—	NO USE	
14	—	NO USE	
15	—	N.C	NO CONNECTION
16	—	NO USE	
17	—	Vss	GROUND
18	—	XT1	
19	—	XT2	
20	—	F-RST	System Reset at "L"
21	—	X1	Sub System Clock (4.19 MHz)
22	—	X2	Sub System Clock (4.19 MHz)
23	OUT	CG STB	Serial STB Pulse To OSD IC
24	OUT	CG DATA	Serial Out to OSD IC
25	—	N.C	NO CONNECTION
26	OUT	CG CLK	Serial Clock to OSD IC
27	OUT	TV CLK	Serial Clock to TV
28	OUT	TV DATA	Serial Output Data to TV
29	IN	S DATA	Serial Input Data to System Control
30	OUT	RMT DATA	Serial Output Data to System Control
31	IN	S CLK	Serial Clock to System Control
32	—	N.C	NO CONNECTION
33	IN	TV PWR	TV POWER ON at "H"
34	—	N.C	Vdd (+5V)
35	—	NO USE	
36	IN	RMT IN	Remocon Pulse INPUT
37	IN	EH sync	H Sync Pulse (EVF)
38	—	N.C	Vdd (+5V)
39	—	Vdd	Vdd (+5V)
40	—	N.C	NO CONNECTION
41	—	N.C	NO CONNECTION
42	—	N.C	NO CONNECTION

Pin No	IN/OUT	Signal Name	Function
43	OUT	SCK 1	Serial Clock for Video IC
44	—	N.C	NO CONNECTION
45	—	N.C	NO CONNECTION
46	—	N.C	NO CONNECTION
47	—	DEW	Sensor on at more than 0.62V
48	IN	SWP	SW Position Adjust
49	IN	T-REEL	Take up Reel Sensor Pulse
50	IN	S-REEL	Supply Reel Sensor Pulse
51	IN	AFT ERR	ATF Error from CXA1204Q
52	—	NO USE	GND
53	—	A Vref	Vdd (+5V)
54	—	A Vdd	Vdd (+5V)
55	IN	C LOG	CLOG at "H"
56	—	N.C	NO CONNECTION
57	—	NO USE	Vdd (+5V)
58	IN	C sync	Composite Sync (15.75kHz)
59	IN	JOG SP/LP	SP at "H" Under Cue, Review Mode
60	IN	D-PG	Drum PG Pulse
61	IN	D-FG	Drum FG Pulse
62	IN	C-FG	Capstan FG Pulse
63	OUT	REV-H	Capstan Motor Reverse at "H"
64	OUT	C-ON	Capstan Motor on at "H"
65	OUT	C-ERR H	Capstan Motor ON, OFF at "H"
66	OUT	D-D/A	Drum Error Output
67	OUT	C PWM	Capstan Error Output
68	OUT	C BRAKE	Capstan Motor Brake at "H"
69	IN	START S	Start, Sens at "L"
70	IN	END S	End, Sens at "L"
71	—	NO USE	Vdd (+5V)
72	—	Vdd	Vdd (+5V)
73	—	Vss	GND
74	—	N.C	Vdd (+5V)
75	OUT	D ON	Drum Motor on at "H"
76	OUT	D-V	JOG Dummy Vertical Sync at "H"
77	OUT	VCS	Video IC Select at "L"
78	OUT	FE ON	Fling Erase On at "L"
79	OUT	RF SW	Head Switch Pulse
80	OUT	GAIN SW	ATF Gain SW Pulse

NOTES

DECK MECHANISM SECTION

FC5TRC1

5-Inch Color TV/VCR

Sec.2: Deck Mechanism Section

Standard Maintenance

Alignment for Mechanism

Disassembly/Assembly of Mechanism

Deck Printed circuit Boards

Deck Exploded Views

Deck Parts List

CONTENTS

Deck Disassembly Instructions	2-2	Mechanical Adjustments	2-22
Service Fixtures and Tools	2-17	Deck Exploded Views	2-27
Standard Maintenance	2-18	Deck Mechanical Parts List	2-32

DECK DISASSEMBLY INSTRUCTIONS

Before you start the following service work, set the unit to EJECT mode and remove the deck from the Top Cabinet and the Cassette Holder. When reassembling, follow the steps in reverse order.

STEP /LOC. No.	START-ING No.	PART		REMOVAL		
				Fig. No.	REMOVE* UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
1	1	Cassette Holder Assembly	T	DM1	4(S-1)	Note7
2	2	Power Logic Assembly	T	DM2, DM4	*2(S-2), (S-3)	Note1
3	2	Input Gear	T	DM4	(C-1)	Note2
4	2	Mode Switch	T	DM4		
5	2	Pinch Operation Lever Assembly	T	DM4		
6	2	Guide Set Lever	T	DM4	(C-2)	Note2
7	2	Logic Drive Lever Assembly	T	DM4		Note3
8	2	Power Logic Cam	T	DM4		
9	2	LD Drive Gear	T	DM4, DM5 DM6	(P-1)	Note8, Note9
10	2	Guide Operation Link Assembly	T	DM4, DM7		Note10
11	2	Loading/Unloading Stopper	T	DM2, DM4	(C-3), (P-2)	Note2
12	2	Capstan Motor	T/B	DM2, DM3 DM4	(S-4), 2(S-5), (S-6)	Note4
13	2	RG Guide Assembly	T/B	DM2, DM3 DM8	(C-4)	Note2
14	14	Cylinder Grounding Brush Assembly	B	DM3, DM9	(S-7)	Note11
15	14	Cylinder Assembly	T/B	DM2, DM3	3(S-8)	Note5
16	14	Cylinder Base	T	DM2, DM3 DM10	(S-9), 6(S-10)	Note6
17	2	Pressure Roller Arm Assembly	T	DM2	(P-3), (C-5)	Note2
18	2	MG1 Slide Assembly	T	DM2, DM11 DM12	(C-6), 2(S-22)	Note2, Note12
19	2	Outer Guide Rail Assembly	T	DM13, DM14 DM15, DM16	(C-7), (S-11), (S-12) 2(S-23), (L-a)	Note2, Note13
20	2	Inner Guide Rail	T	DM13	(L-b), (L-c), (L-d) (L-e)	
21	2	Ring Guide	T	DM17	(S-13)	
22	2	Upper Ring Gear Assembly	T	DM17		

STEP /LOC. No.	START-ING No.	PART		REMOVAL		
				Fig. No.	REMOVE* UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
23	2	Upper Joint Gear	T	DM17		
24	2	Lower Ring Gear Assembly	T	DM17		
25	2	RG Guide Holder	T	DM17	(S-14)	
26	2	Lower Joint Gear	T	DM17		
27	27	Mechanism Cover	T	DM2, DM18	2(S-15)	
28	27	Band Brake Assembly	T	DM2, DM18 DM19		Note15
29	27	Brake Operation Slider	T	DM2, DM18	(C-8)	Note2
30	27	Brake Operation Lever Assembly	T	DM2, DM18 DM20		
31	19	Bracket Spring	T	DM2	(P-5), (S-16)	
32	19	Reel Base Assembly	T	DM2, DM18		
33	19	Gear Bracket Assembly	T	DM2, DM4		
34	19	T Operation Lever Assembly	T	DM2, DM3	(P-6), (L-f)	
35	19	Reel Operation Lever Assembly	T	DM2, DM21		Note16
36	19	S - Brake	T	DM2, DM22 DM23		
37	19	T - Brake	T	DM2, DM22 DM23		
38	19	Back Tension Lever Assembly	T/B	DM2, DM3	(P-7), (C-9)	Note2
39	19	BT Set Slider	T	DM2, DM24		Note17
40	19	Lever Bracket Assembly	B	DM3, DM22	(S-17)	
41	41	Direction Slide Assembly	B	DM3, DM25 DM26	(P-9), (C-10)	Note2, Note18
42	41	Review Brake Lever	B	DM3, DM26		
43	41	Slide Joint Assembly	B	DM3, DM26	(C-11)	Note2
44	41	Swing Arm Assembly	B	DM3, DM26	(C-12)	Note2
45	41	Reduction Gear	B	DM3, DM26	(C-13)	Note2
46	46	BT Cam Lever	B	DM3	(P-10), (C-14)	Note2
47	46	Joint Holder	B	DM3		
48	41	L BT Lock Lever	B	DM3	(P-11), (C-15)	Note2
49	41	U BT Lock Lever	B	DM3		
50	41	Direction Gear Assembly	B	DM3, DM26	(C-16)	Note2
51	51	R Switch Holder	B	DM3, DM26	(S-18)	

STEP /LOC. No.	START-ING No.	PART		REMOVAL		
				Fig. No.	REMOVE* UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	Note
52	52	L Switch Holder	B	DM3, DM26	(S-19)	
53	53	Impedance Flange	T	DM2, DM18		Note14
54	53	Impedance Roller	T	DM18		
55	55	Tape End Sensor Holder(R)	T	DM10	(S-20)	
56	56	Tape End Sensor Holder(L)	T	DM10	(S-21)	

- ①: Order of steps in Procedure
When reassembling, follow the steps in reverse order.
These numbers are also used as the identification (location) number of parts in Figures.
- ②: The STEP/LOC. No. to start with before coming to disassemble the desired part.
- ③: Part to be removed or installed.
- ④: Location of part.
T = Top B = Bottom
- ⑤: Fig. No. showing Procedure or Part Location.
- ⑥: Identification of part to be removed, unhooked, unlocked, released, unplugged, or desoldered.
P = Spring C = Cut Washer S = Screw L = Locking Tab
* = Unhook, unlock, release, unplug, or desolder
Example : 2(C-2) = 2 Cut Washers(C-2)
- ⑦: Notes to be followed when disassembling or installing.

Note1 : Rotate Mode SW PCB clockwise to release the side lock on the Power Logic Assembly. Then lift and remove the Power Logic Assembly.

Note2 : The washer is not reusable. If removed, install a new one.

Note3 : Remove the Logic Drive Lever Assembly while moving the Joint Lever in an upward direction, lifting it off of its pin and then moving it in a counterclockwise direction.

Note4 : Remove the screw (S-6). Then pick up the PCB Bracket. Primary Gear hub points toward top of chassis when installing.

Note5 : Use regular gloves when handling the Cylinder Assembly.

Note6 : Remove the screw (S-9). Then pick up the DEW Sensor. Do not touch the surface of the DEW Sensor.

Note7 to 18 : All the notes numbered above 6 are listed right next to their corresponding figures. For these notes, look for the Fig. No. first.

Note7 : Push the Eject Lever (A) so the Unit is in Cassette Up mode.

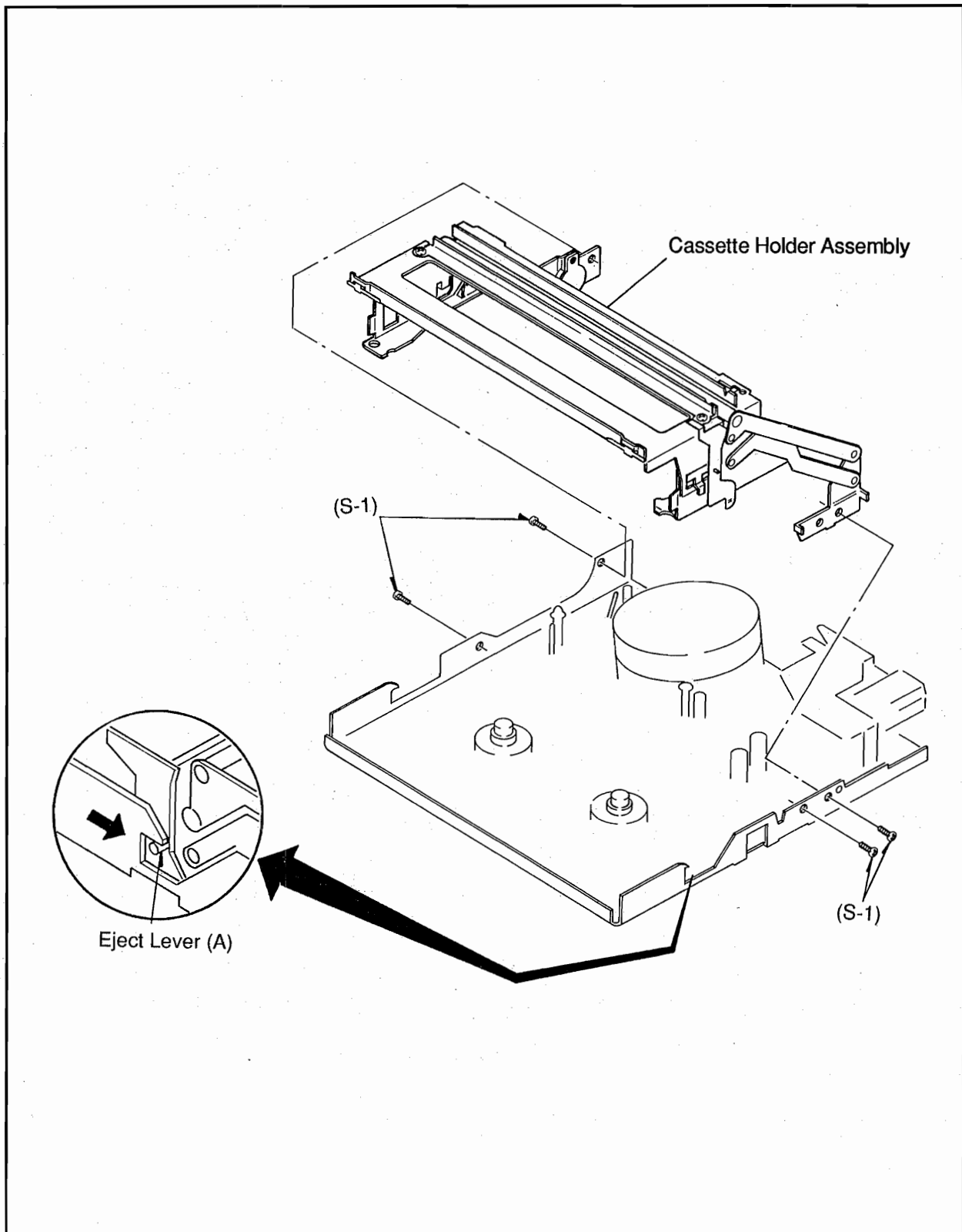


Fig. DM1

Top View

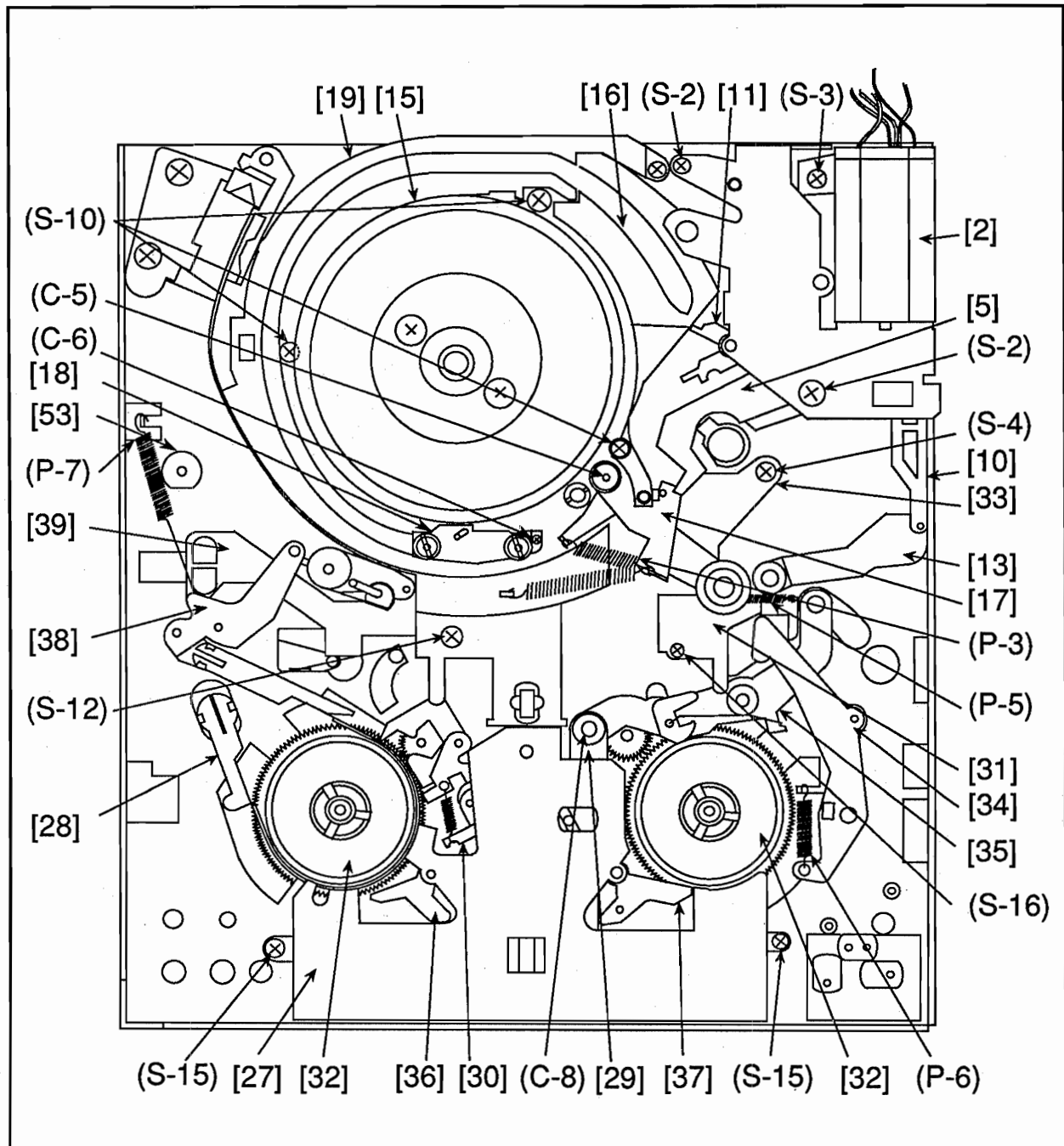


Fig. DM2

Bottom View

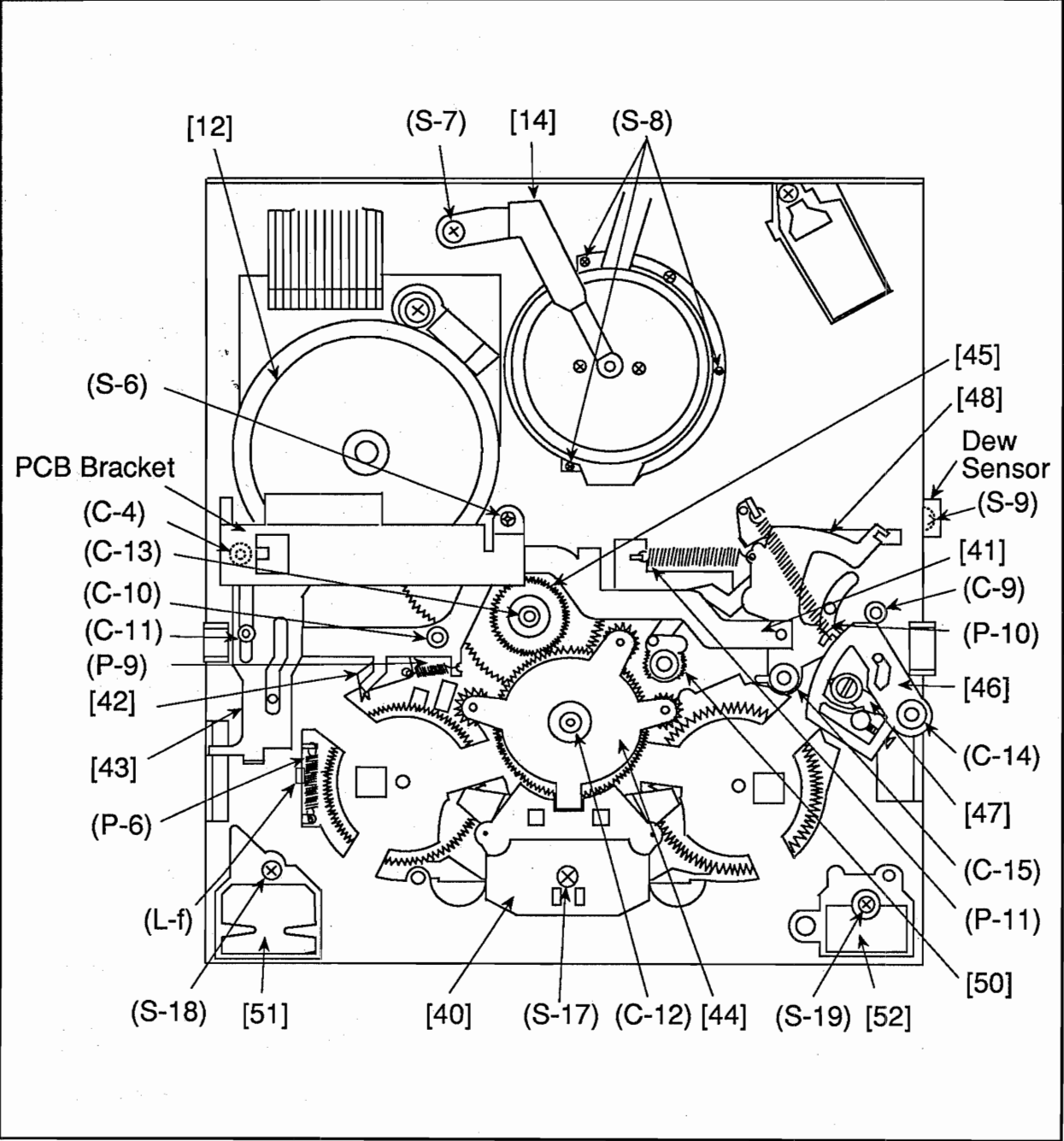


Fig. DM3

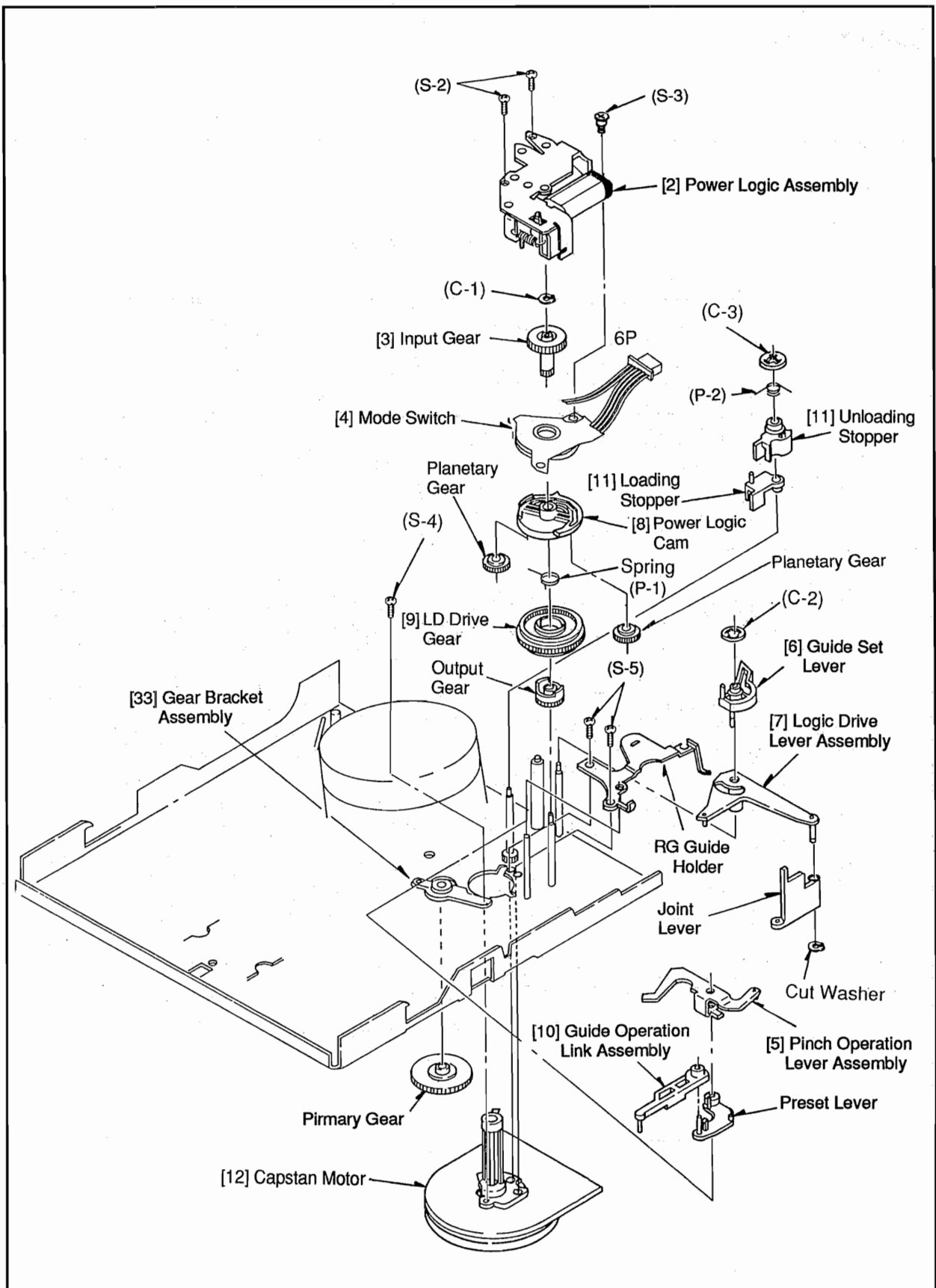


Fig. DM4

Note 8: Move the Loading/Unloading Stoppers to remove the LD Drive Gear. See Fig. DM5.

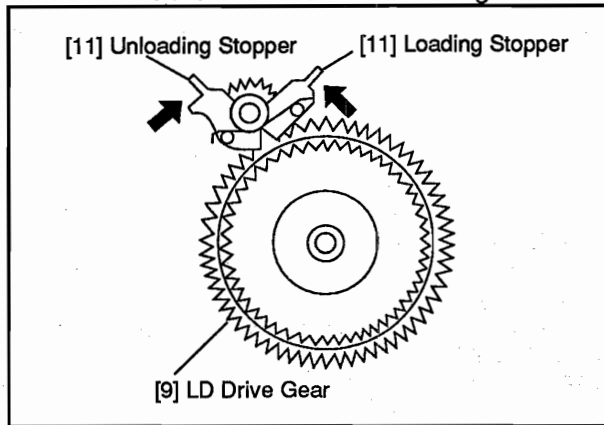


Fig. DM5

Note 9: In order to release Spring (P-1), Fig. DM6, turn the handle(A) clockwise as shown by the arrow 1. After releasing Spring (P-1), turn over the LD Drive Gear and turn the Output Gear clockwise until it stops. Then remove the Output Gear from the LD Drive Gear.

When reassembling, place the LD Drive Gear so the larger notch (C) is to the left and the smaller notch is to the right as shown in Fig. DM6. Then reassemble the Output Gear to the LD Drive Gear with the hole (D) of the Output Gear facing away from you. The two tabs (different in size, though inconspicuous) of the Output Gear should match the notches.

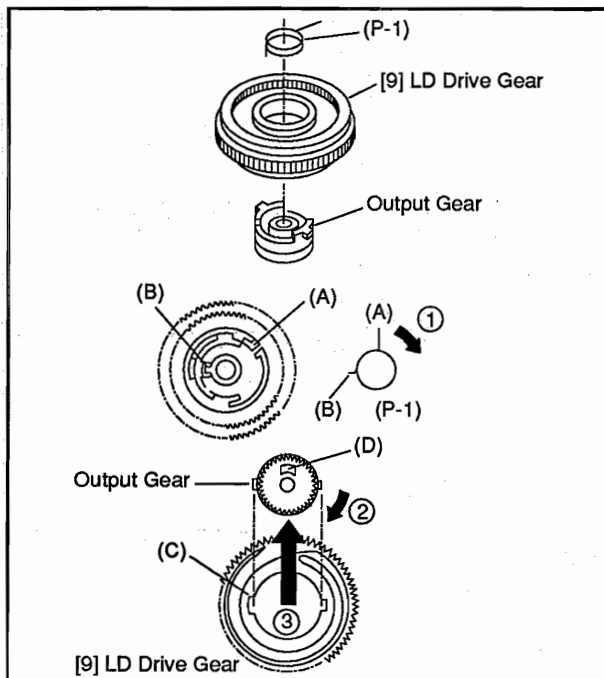


Fig. DM6

Note10 : Turn the Guide Operation Link Assembly counterclockwise until it comes to the position shown in Fig. DM7. Then remove it from the Preset Lever.

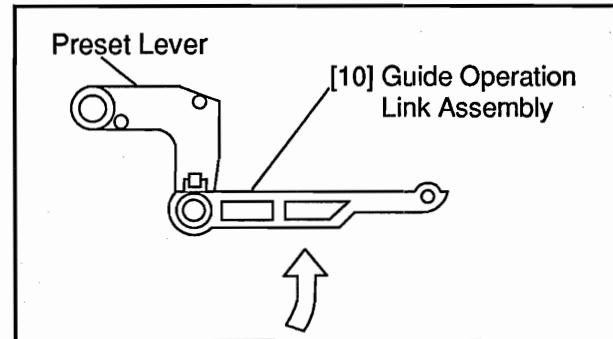


Fig. DM7

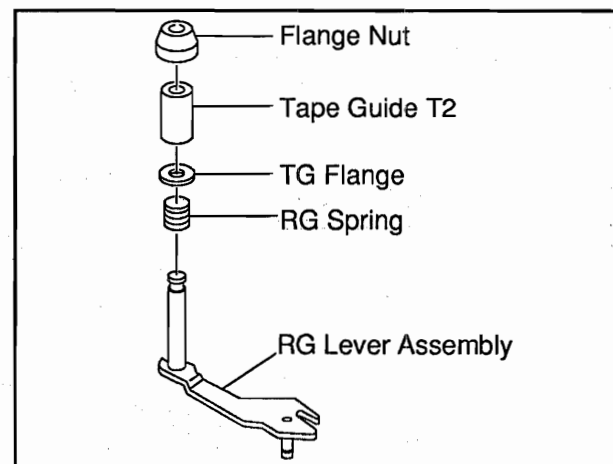


Fig. DM8

Note11 : Adjust the Grounding Plate so that the deviation of the center of the Grounding Plate and the center of the Cylinder Motor Shaft is within 1 mm as shown in Fig. DM9.

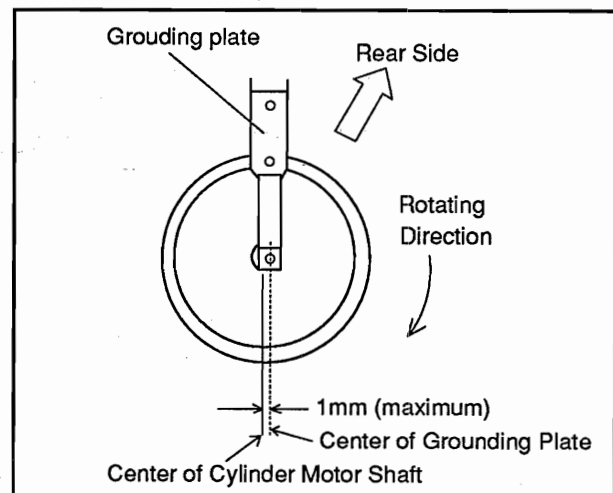


Fig. DM9

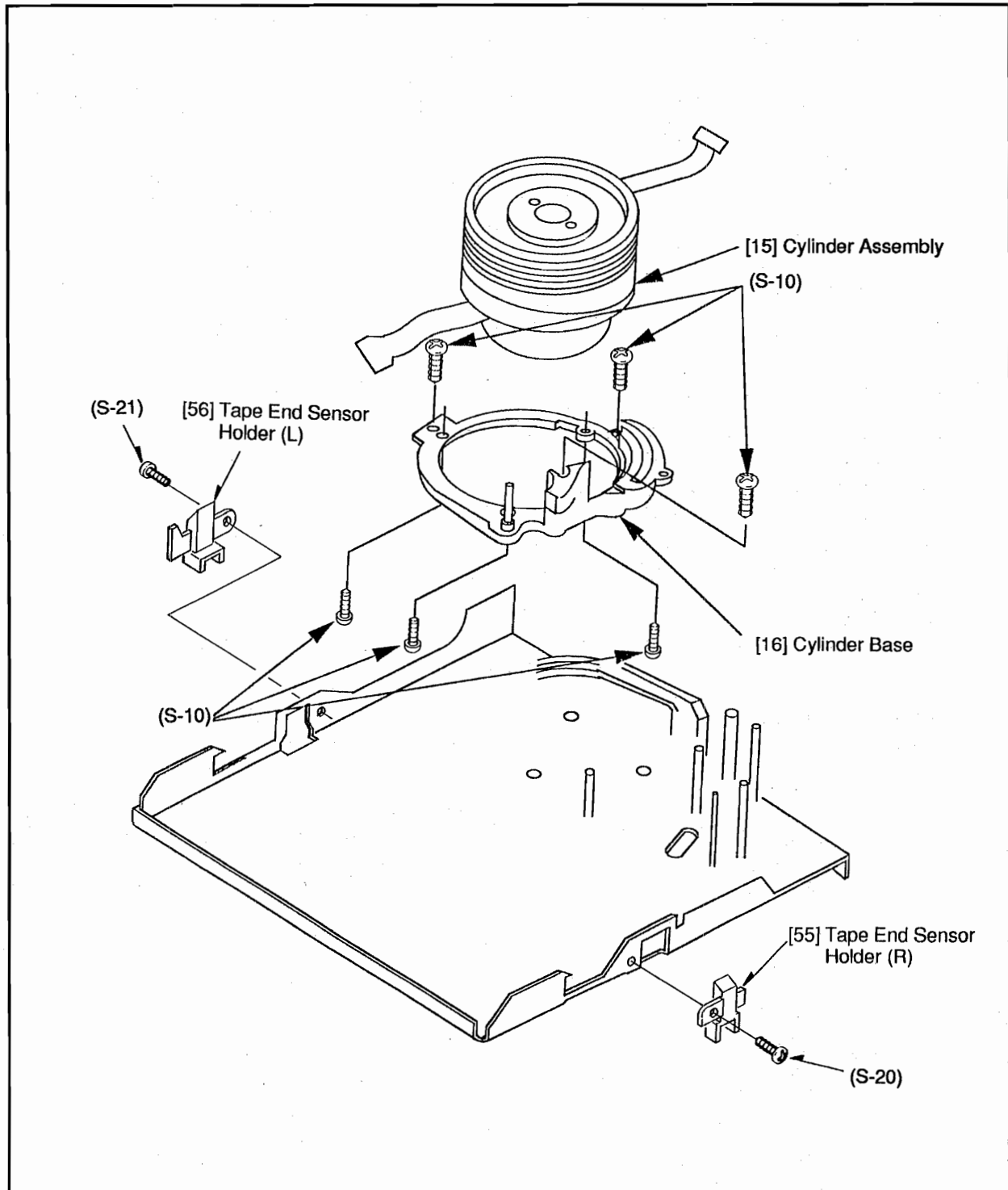


Fig. DM10

Note12 : Move the MG1 Slide Assembly in the direction of the arrows and remove it. See Fig. DM11.

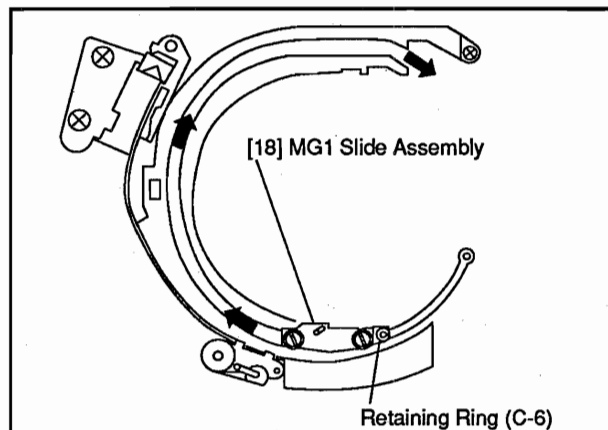


Fig. DM11

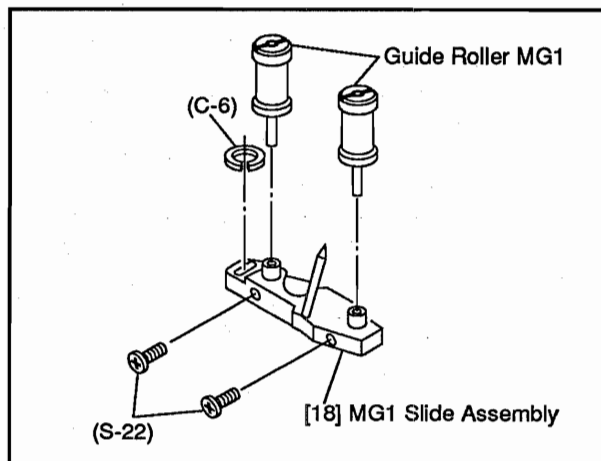


Fig. DM12

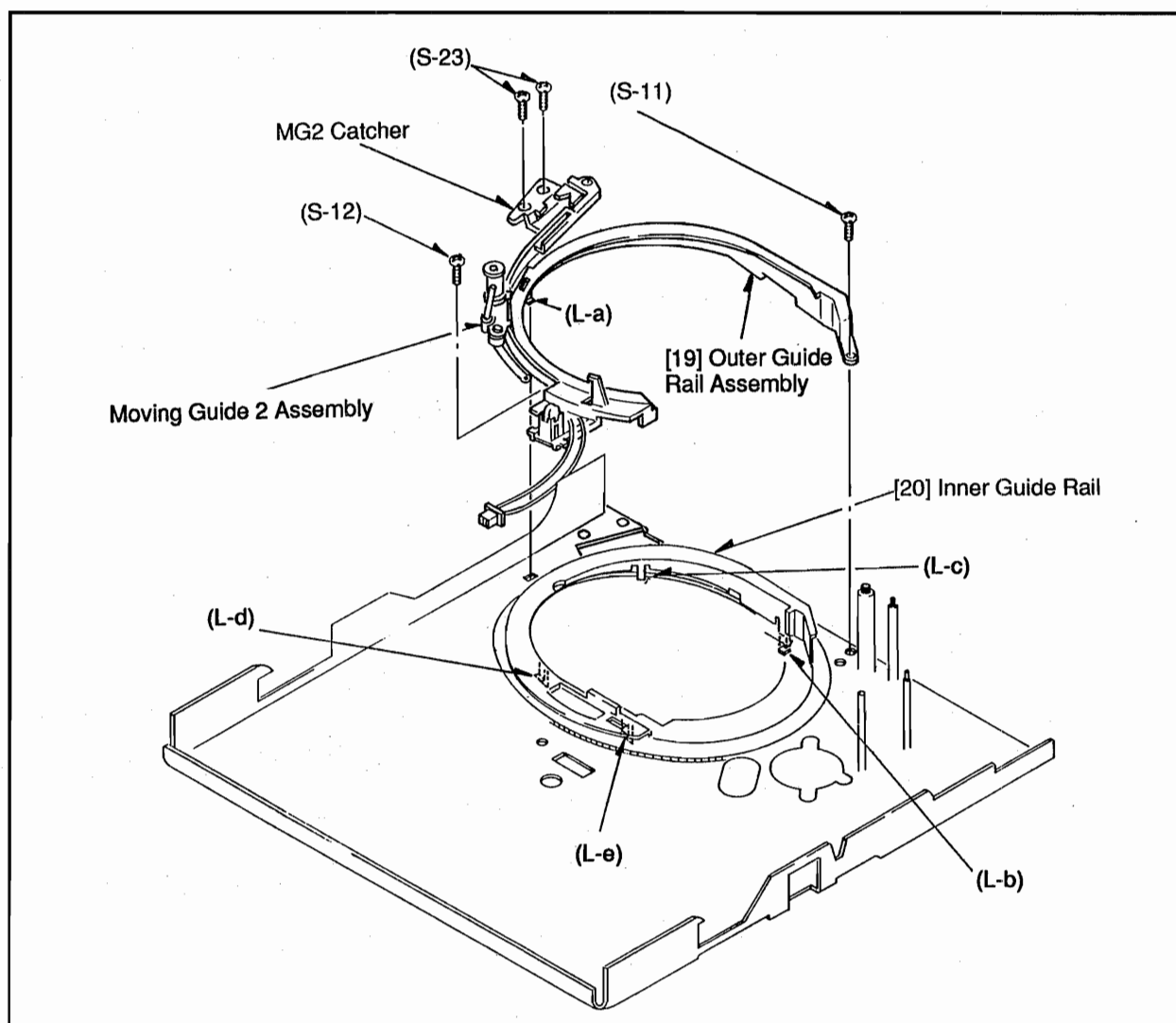


Fig. DM13

Note13 : Rotate the Moving Guide 2 Assembly until Retaining Ring (C-7) can be removed (Fig. DM14). Remove (C-7) and then unlock the Locking Tab (L-a) (Fig. DM13) to remove the Outer Guide Rail Assembly.

When reassembling, make sure that you fix the Outer Guide Rail Assembly to the chassis before fixing the MG2 Catcher to the chassis. After fixing the MG2 Catcher to the chassis, look from the bottom side of the chassis and make sure that the tip of the tab on the Outer Guide Rail Assembly is placed over the edge of the MG2 Catcher.(Fig. DM15)

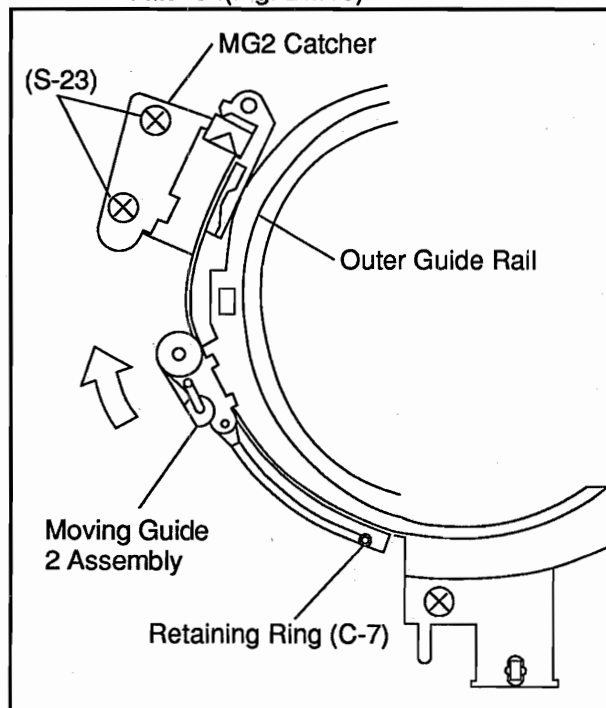


Fig. DM14

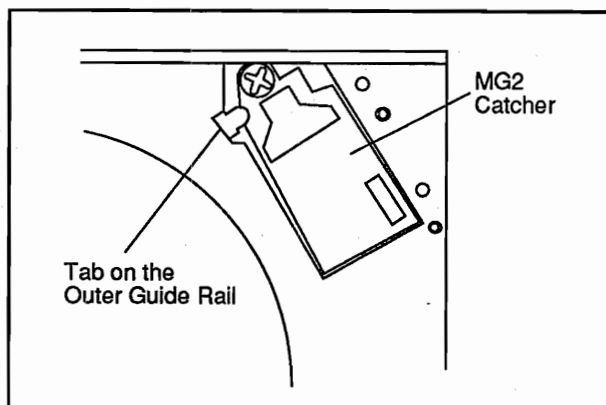


Fig. DM15

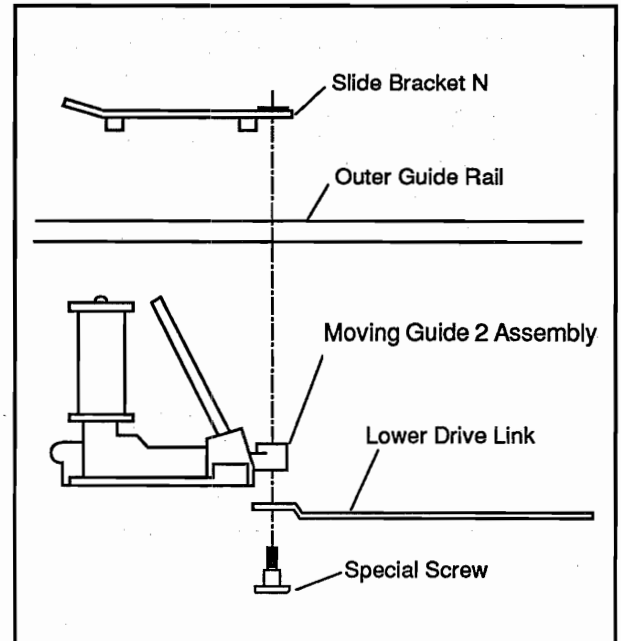


Fig. DM16

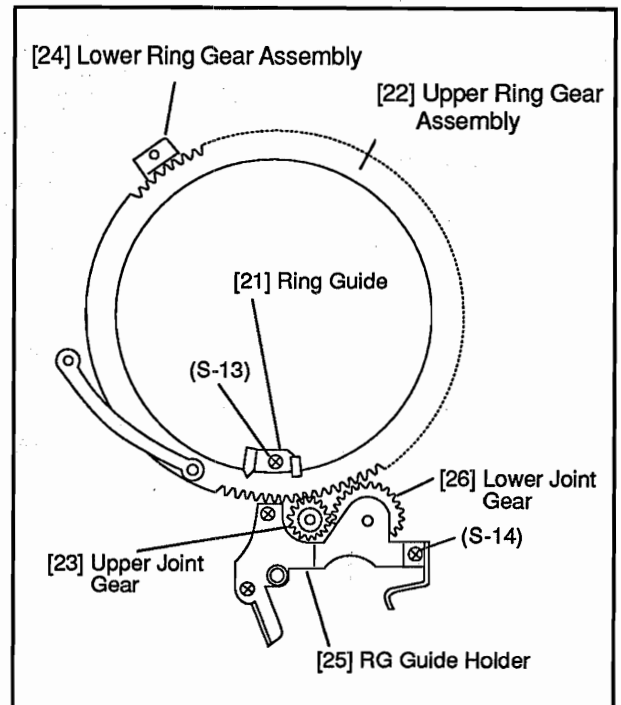


Fig. DM17

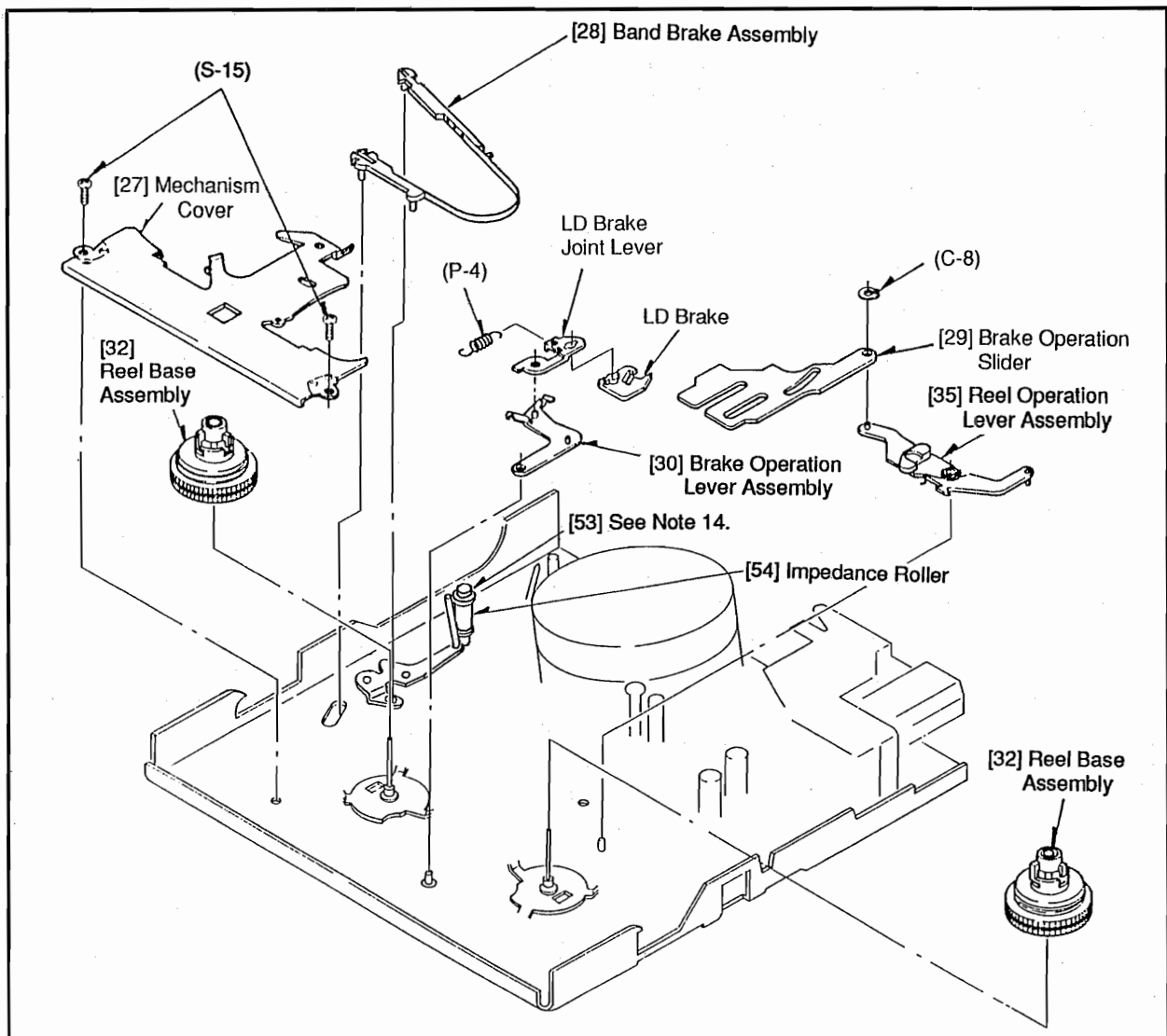


Fig. DM18

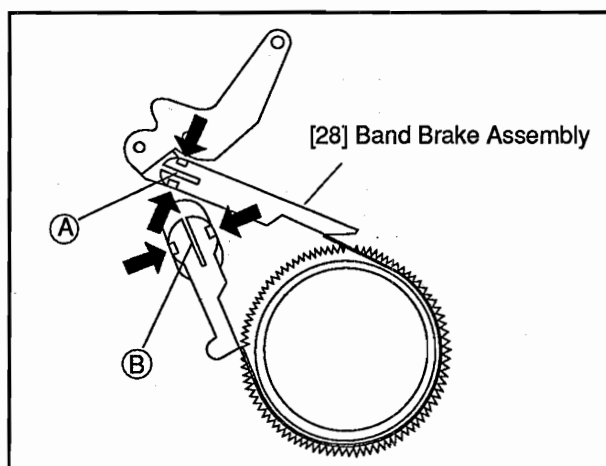


Fig. DM19

Note15 : In order to remove the Band Brake Assembly, squeeze it at the point A and lift it. See Fig. DM19. Do the same at point B.

Note14 : The top of the Impedance Roller Flange should be flush with the top of the Impedance Roller shaft.

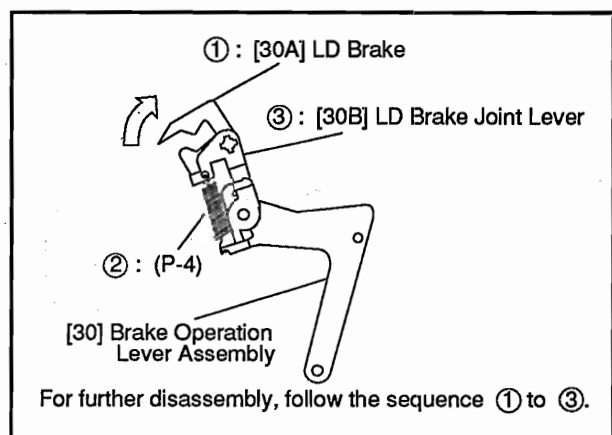


Fig. DM20

Note16 : In order to remove the spring on the Reel Operation Lever Assembly, follow the 3-step procedure shown in Fig. DM21.

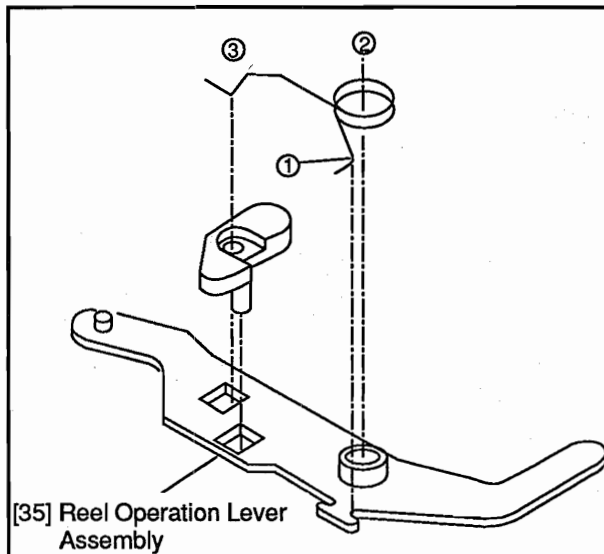


Fig. DM21

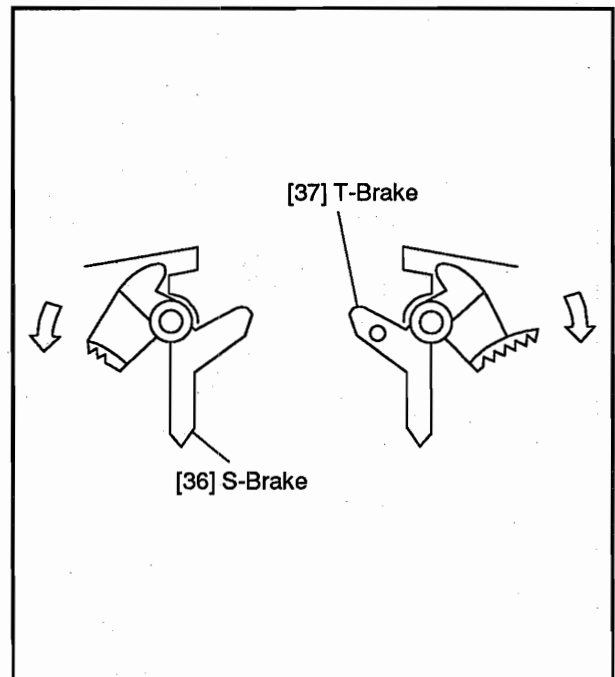


Fig. DM23

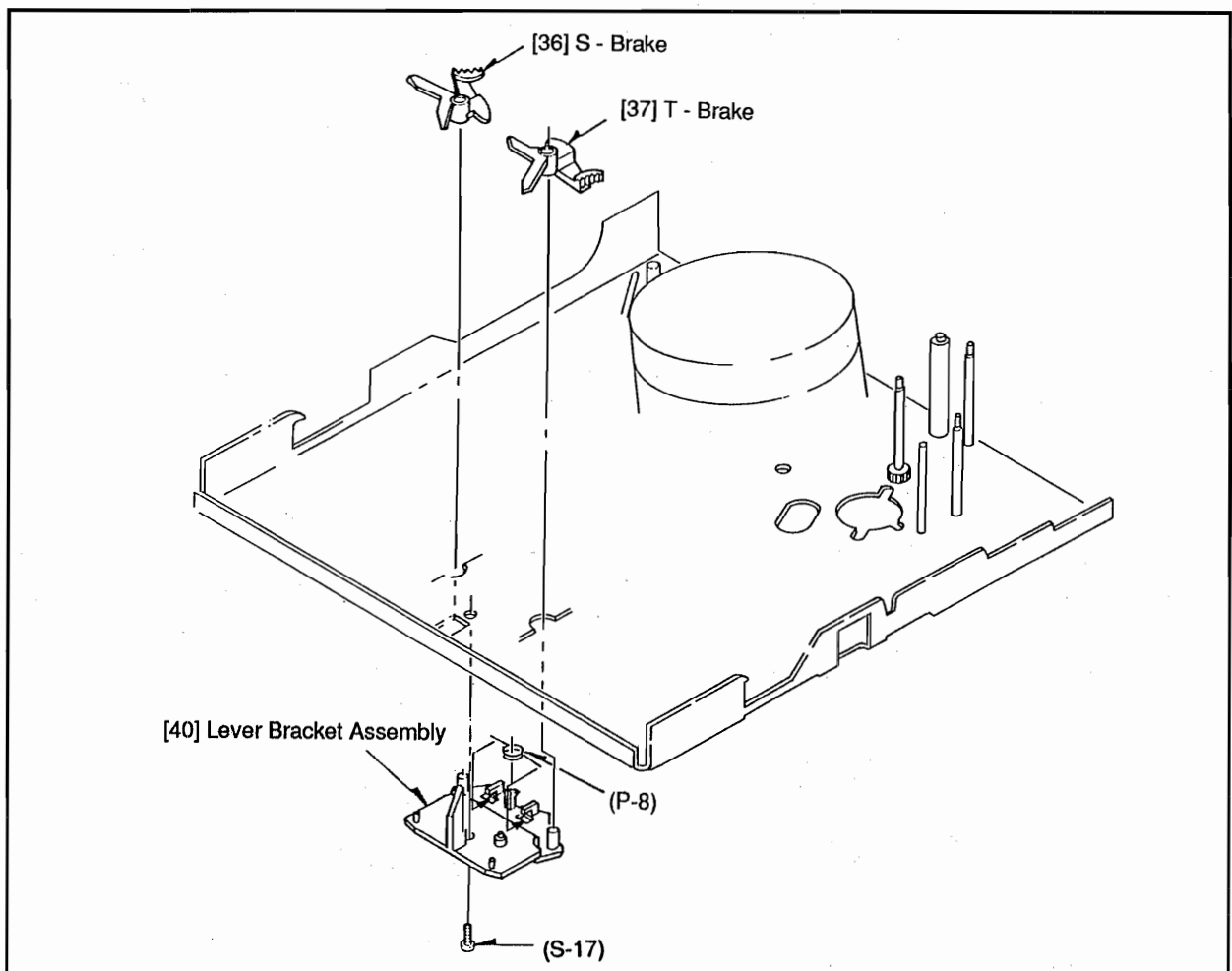


Fig. DM22

Note17 : In order to remove the BT Set Slider, move it in the direction of the arrow 1 and lift it in the direction of the arrow 2. (See Fig. DM24.)

When reassembling, put the hook of the BT Set Slider into the hole of the chassis (the arrow 3) and then slide it in the direction of the arrow 4. (Also see Fig. DM24.) The other end of the BT Set Slider should go underneath the T Operation Lever Assembly as shown by the arrow 5. While doing this, turn the T Operation Lever counter-clockwise so that the end of the BT Set Slider gets properly hooked by the T Operation Lever Assembly.

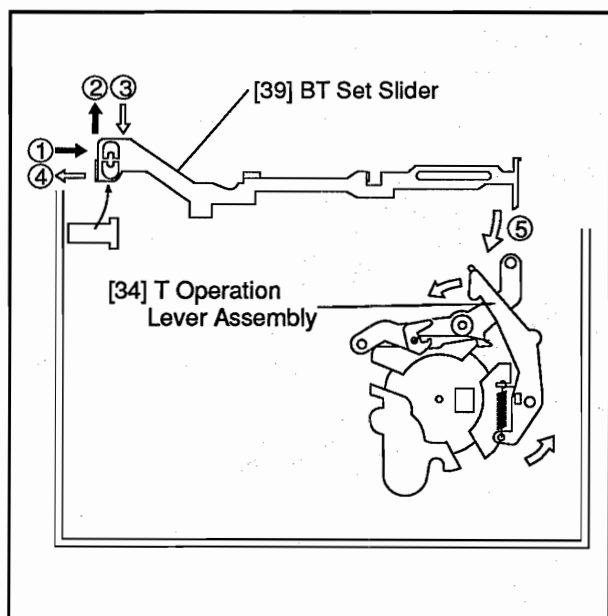


Fig. DM24

Note18 : Turn the Direction Slide Assembly counter-clockwise about 45 degrees so that it comes out from under the hook of the L BT Lock Lever. See Fig. DM25.

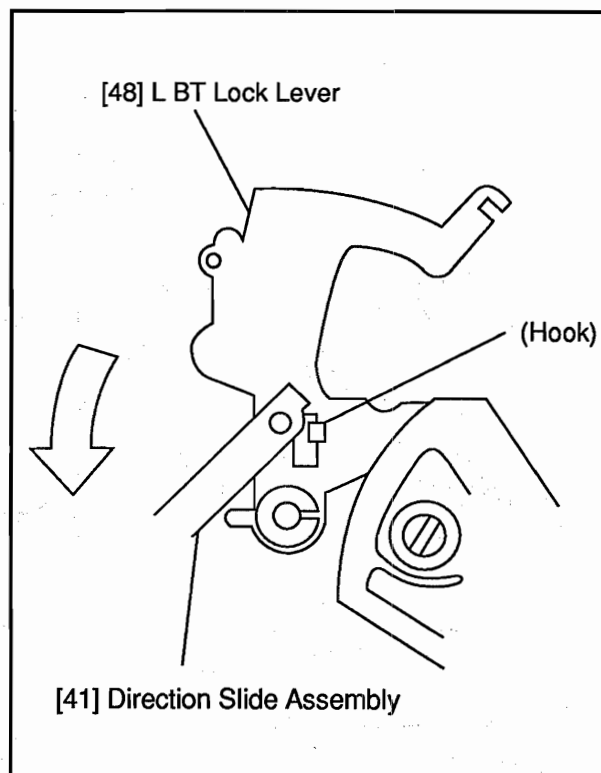


Fig. DM25

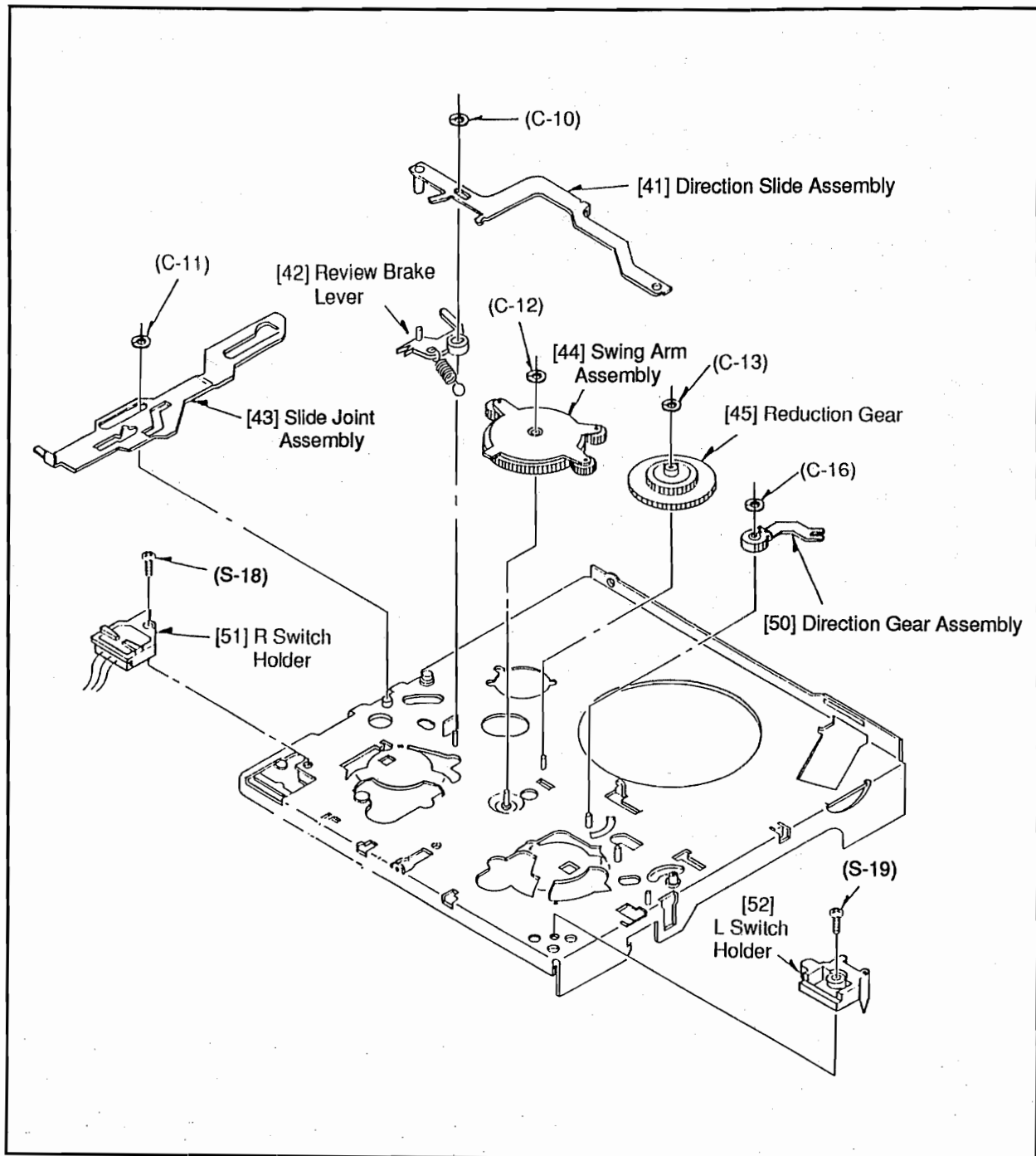


Fig. DM26

SERVICE FIXTURES AND TOOLS

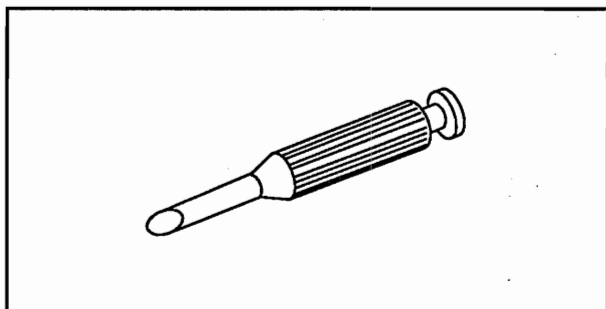
The following equipment is required for Deck Adjustments.

Test Equipment

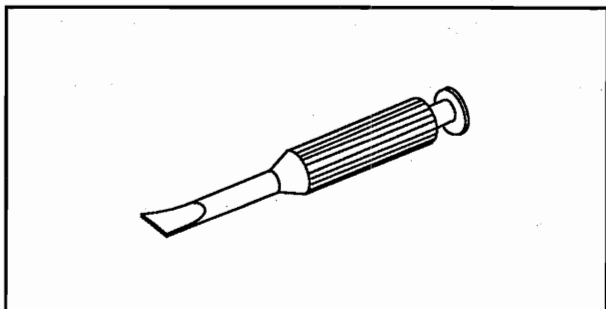
- a) Color Monitor TV
- b) Oscilloscope

Tools

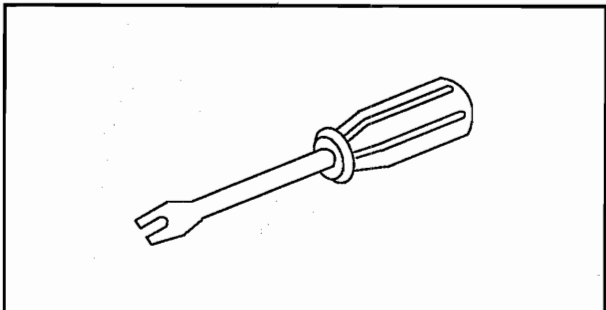
- a) Screwdriver : +No.00(or equivalent)



- b) Screwdriver : -2.5mm

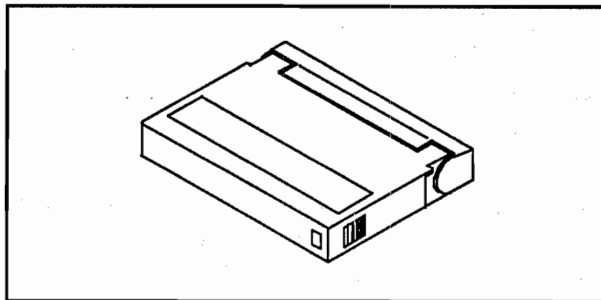


- c) Screwdriver : (Special)

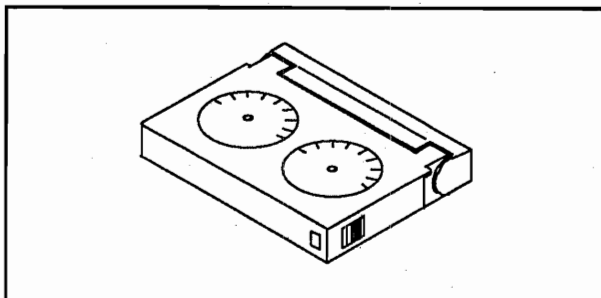


Tape and Torque Meter

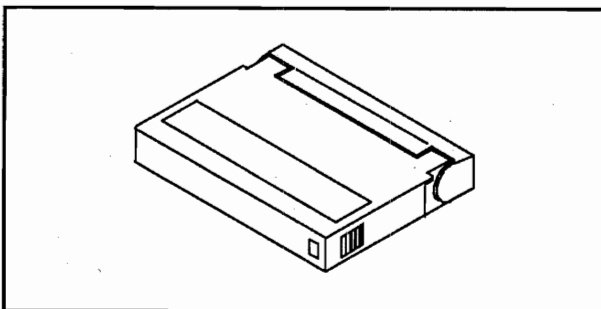
- a) Alignment Tape: SP(FM-8N)



- b) Torque Meter (SPK-8T-0102)



- c) Blank Tape (P-6-15 or equivalent)



STANDARD MAINTENANCE

Cleaning of Video Head Cylinder Assembly (Fig.1)

(using a chamois skin)

1. Remove the right side cabinet.
2. Put on a glove (thin type) to avoid touching the upper and lower drums with your bare hands.
3. Put a few drops of 91% isopropyl alcohol on the chamois skin. Gently rub the video heads with this skin in the direction of tape travel. Then place this skin gently against the upper drum and turn the drum to the right and to the left.

Notes:

- a) The video head surface is made of very hard material. However, since it is very thin, it can be easily damaged. Avoid cleaning it vertically.
- b) Wait for the cleaned part to dry thoroughly before operating the unit.
- c) Do not reuse a stained chamois skin.
- d) When replacing the upper drum, also replace the lower drum.

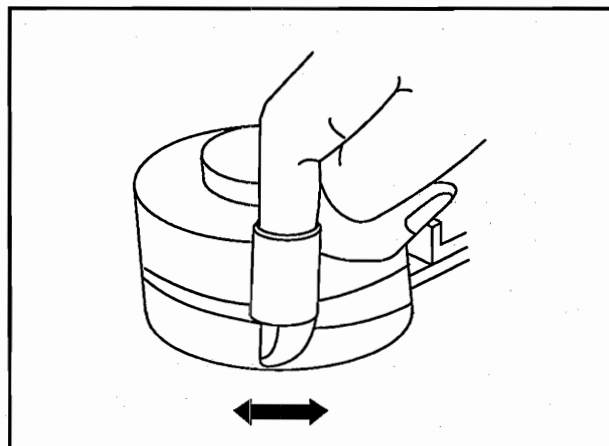


Fig. 1

Mode Switch Positioning (Fig.2)

To set the Mode Switch on the Deck, align the hole of the LD Drive Gear with the hole of the chassis, then put the Power Logic Cam on the LD Drive Gear. Next, insert the 2 bosses of the Mode Switch into the grooves of the Power Logic Cam.

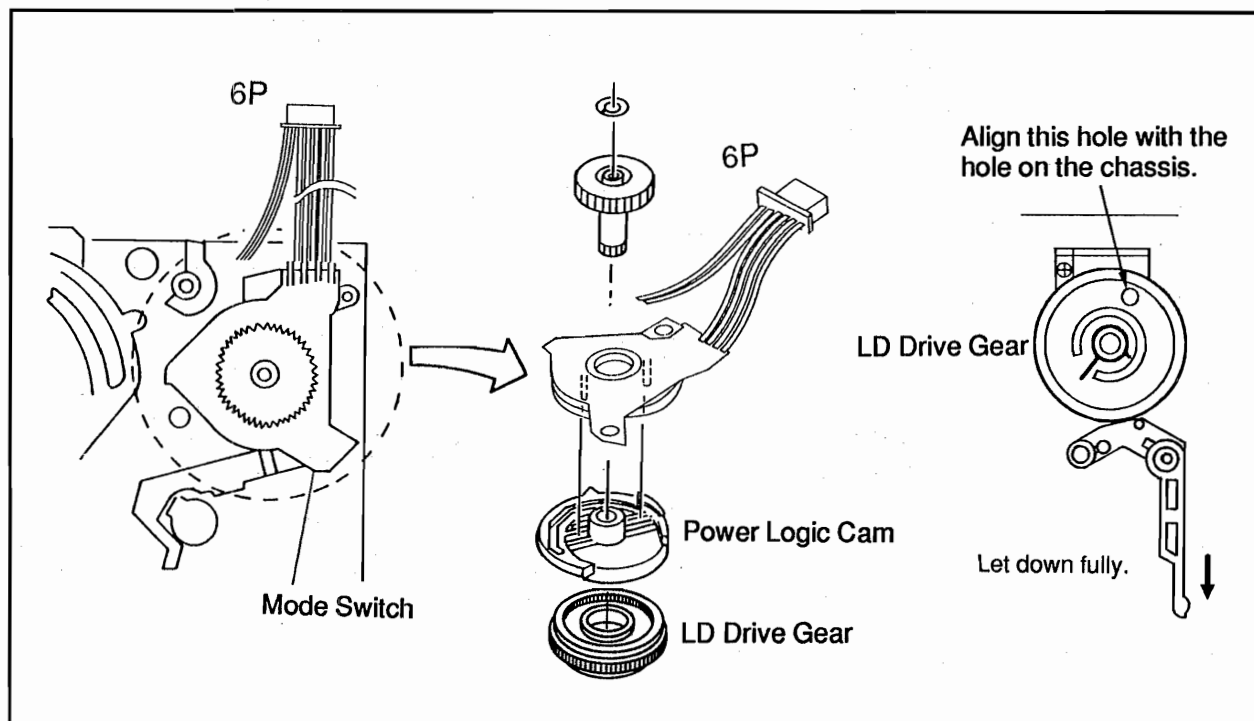


Fig. 2

BT (Back Tension) Adjustment (Fig.3)

In REC Mode, adjust the Adjustment Screw so that the BT torque is $6.5 \pm 2g\text{ cm}$ ($5.6 \pm 1.7\text{ in. lb.}$) on the torque measuring cassette.

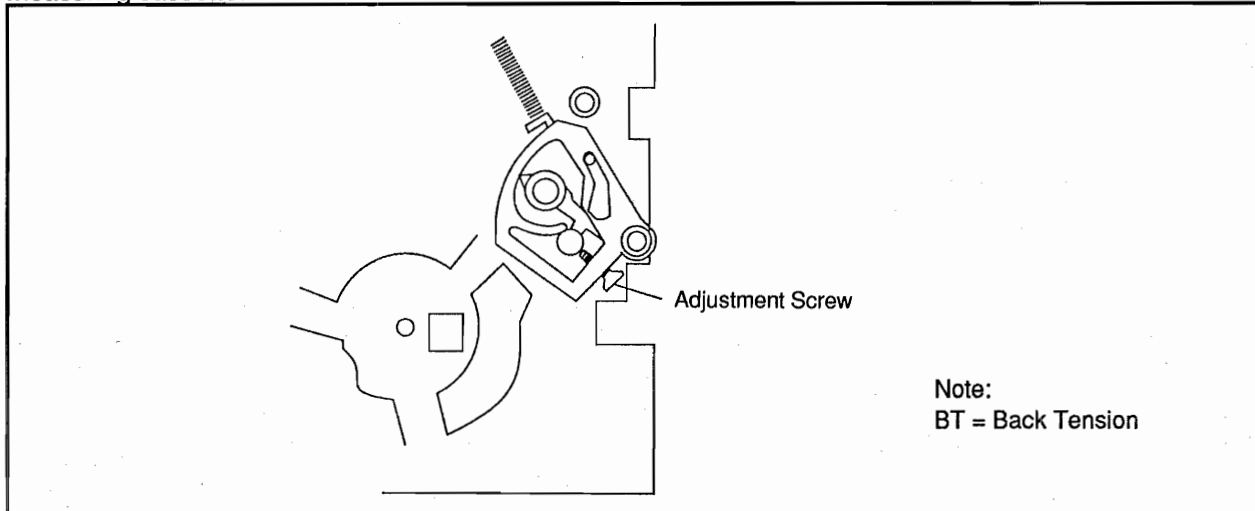


Fig. 3 Deck (Bottom View)

End LED (Infrared) Setting (Fig.4)

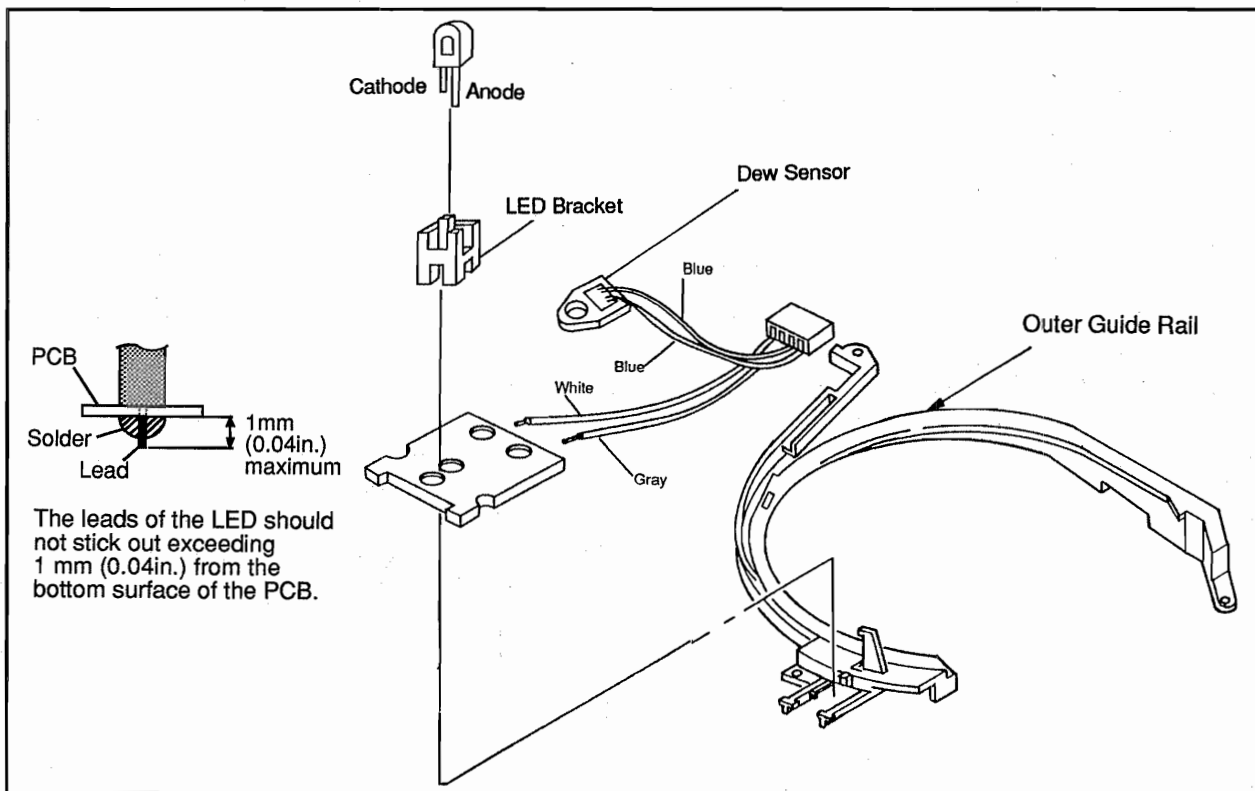


Fig. 4.

Notes:

- Confirm wire colors.
- When soldering, component leads must be less than 1 mm (0.04 in.) from the PCB.
- The LED must be set into position on the Outer Guide Rail.
- Do not touch the sensor portion of the Dew Sensor.

Cylinder Base Assembly Setting (Fig.5)

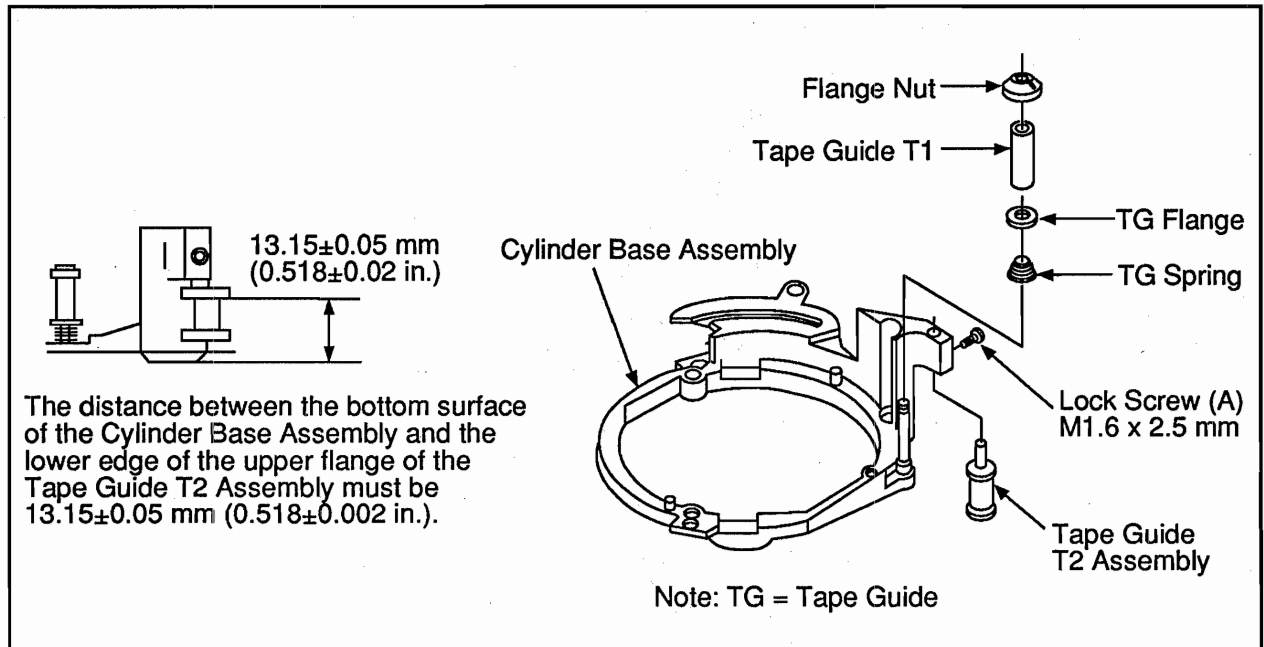


Fig. 5

Notes:

- 1) Place the TG Spring so that the large side is down.
- 2) Adjust the Tape Guide T2 Assembly as shown above.
- 3) Tighten the lock screw (A) with the torque of $200 \pm 20 \text{ g cm}$ ($174 \pm 17 \text{ in. lb.}$).

MG1 Slide Assembly Setting (Fig.6)

1. Put the Guide Roller MG1 and Guide Roller MG1 (2) onto the MG1 Slide Assembly, then secure it with lock screws (B).
2. Tighten these lock screws (B) with the torque of $150 \pm 20 \text{ g cm}$ ($130 \pm 17 \text{ in. lb.}$).

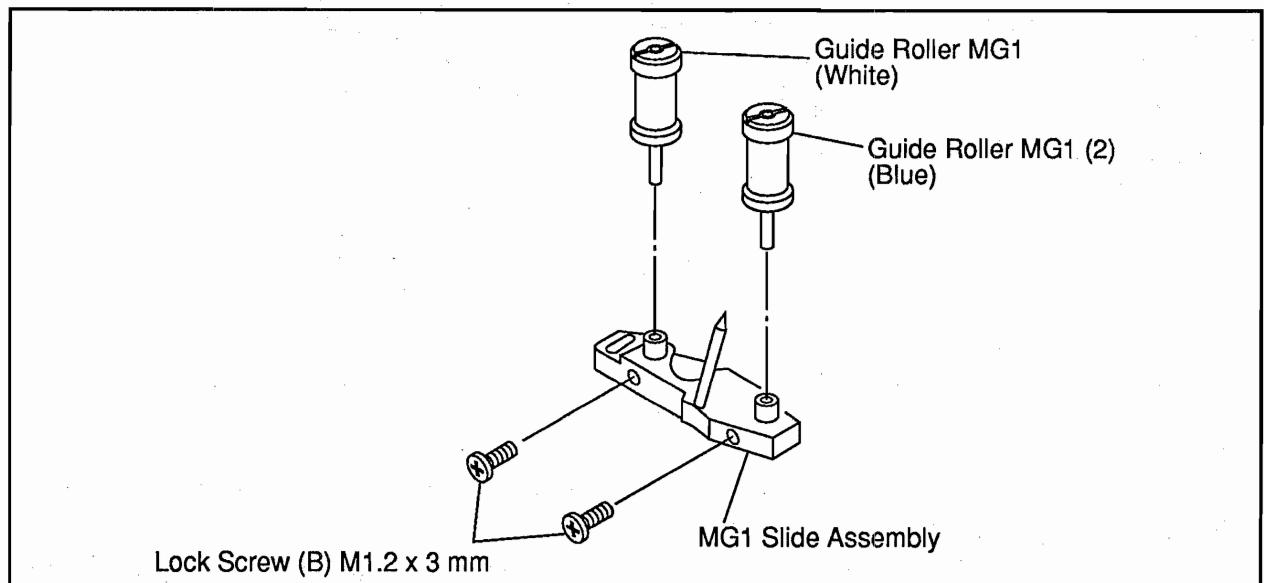


Fig. 6

R Recognition SW Assembly (Fig.7)

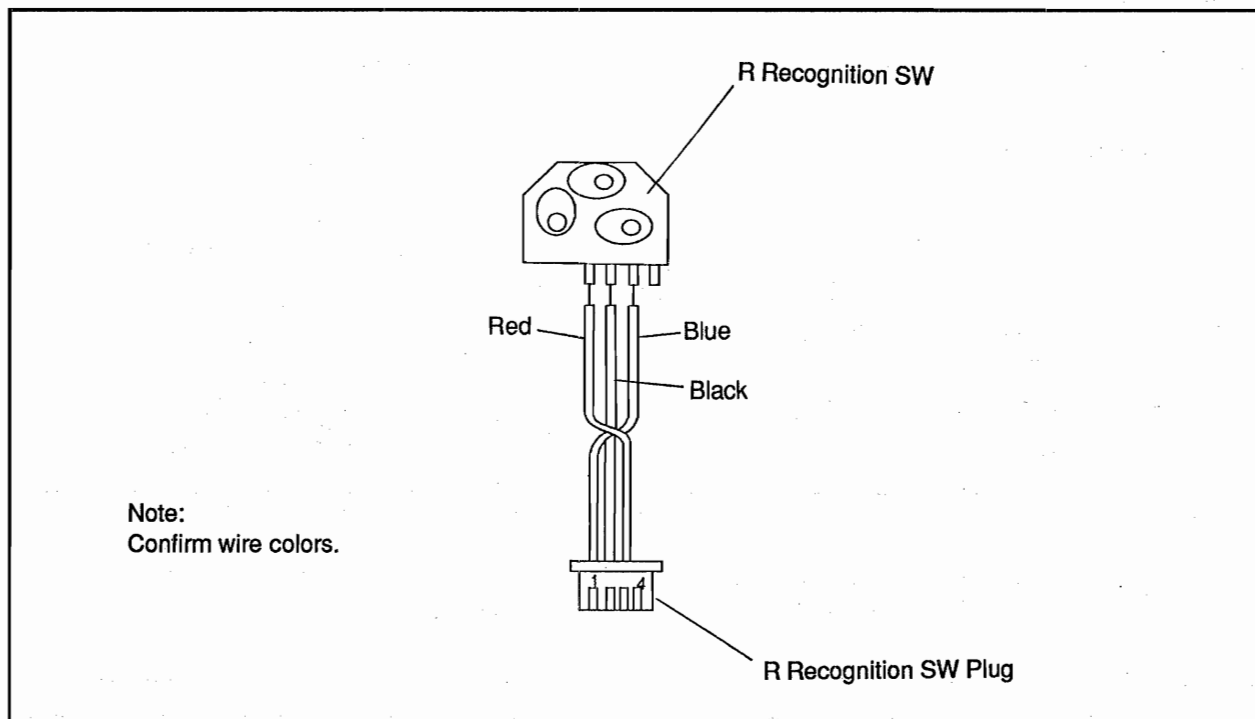


Fig. 7

Recognition Mode Switch (Fig.8)

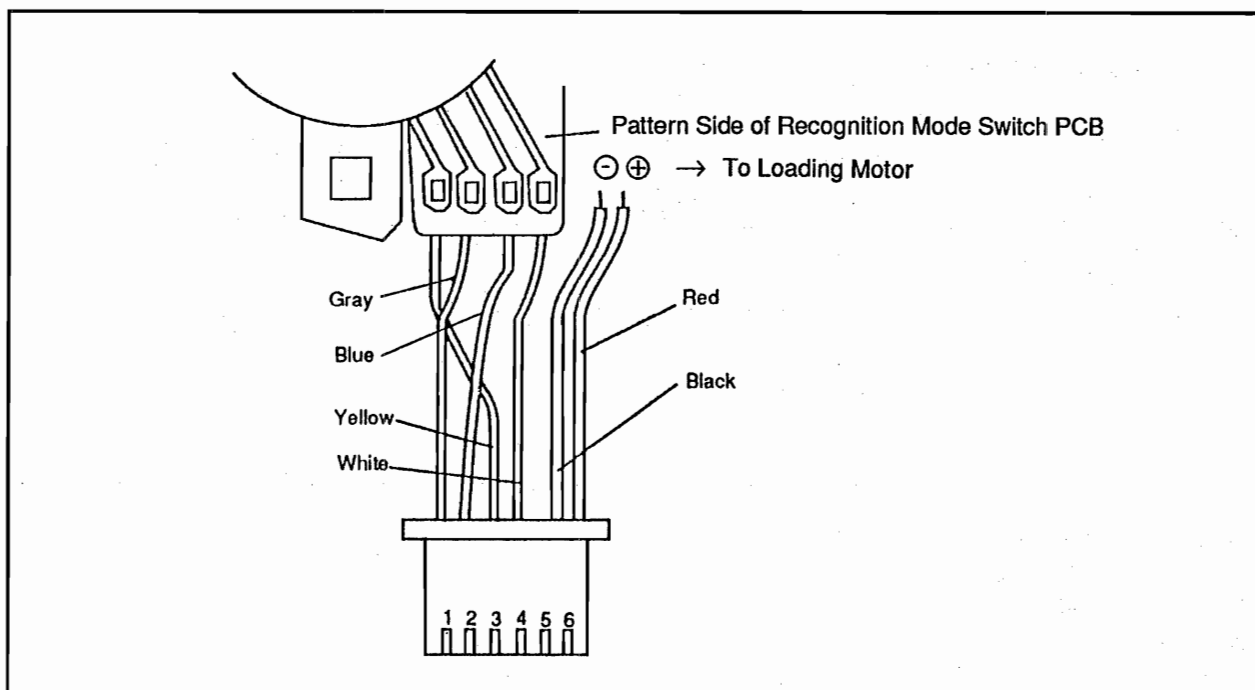
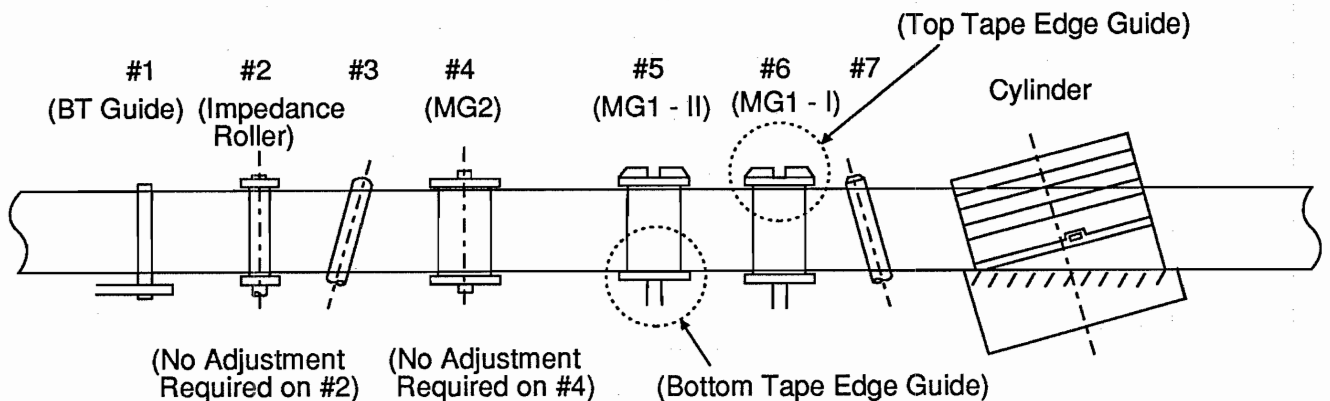


Fig. 8

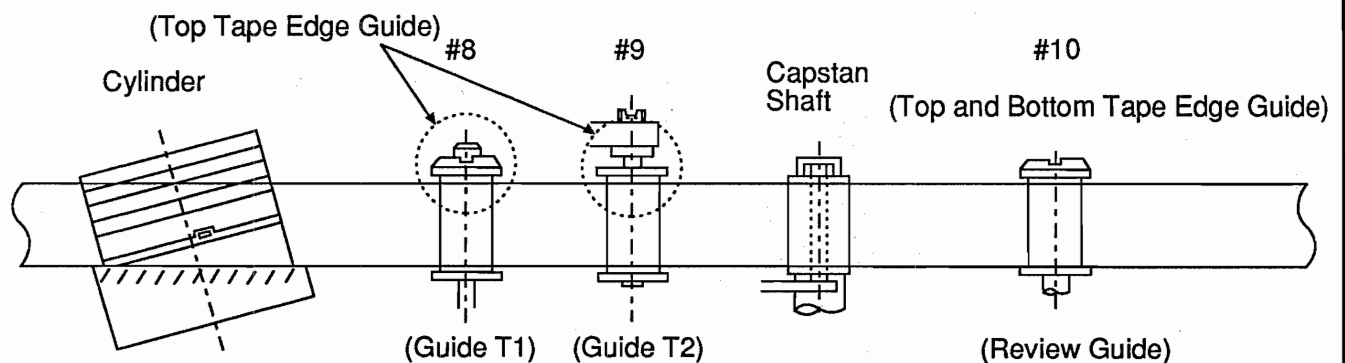
MECHANICAL ADJUSTMENTS

Guides of the Tape

Tape Supply Side



Tape Take-Up Side



- #1 Back Tension Guide
- #2 Impedance Roller - Fixed
- #3 Slant Guide MG2
- #4 MG2 - Fixed
- #5 MG1 - II (White) - The flange guides the bottom edge of the tape.
- #6 MG1 - I (Blue) - The flange guides the top edge of the tape.
- #7 Slant Guide MG1
- #8 Guide T1 - The flange guides the top edge of the tape.
- #9 Guide T2 - The flange guides the top edge of the tape.
- #10 Review Guide - The flanges guide both edges of the tape.

Checking the Envelope of RF Waveform

1) Clean the tape transport mechanism: Tape Guides, Cylinder Drum, Capstan, and Pinch Roller.

2) Connect the oscilloscope.

Oscilloscope	Connect to
1ch	TP709 (PB-RF)
External Trigger	TP706 (RF-SW)
Ground	TP710 (ENV GND)

3) Play back the alignment tape (FM-8N) and check the envelope of the RF waveform.

- If the waveform is flat (Fig. 1-1-a), the tape transport mechanism is properly adjusted.
- If the left portion of the waveform is not flat (Fig. 1-1-b), an adjustment is required at the supply side of the transport mechanism. Proceed to "Tape Supply Alignment."
- If the right portion of the waveform is not flat (Fig. 1-1-c), an adjustment is required at the take-up side of the transport mechanism. Proceed to "Tape Running Position Alignment."

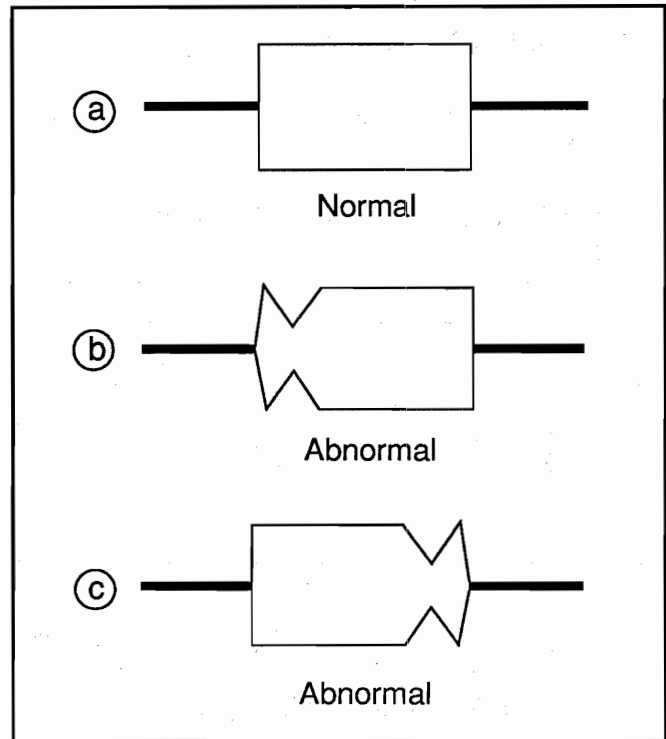


Fig. 1-1

Tape Guide Location

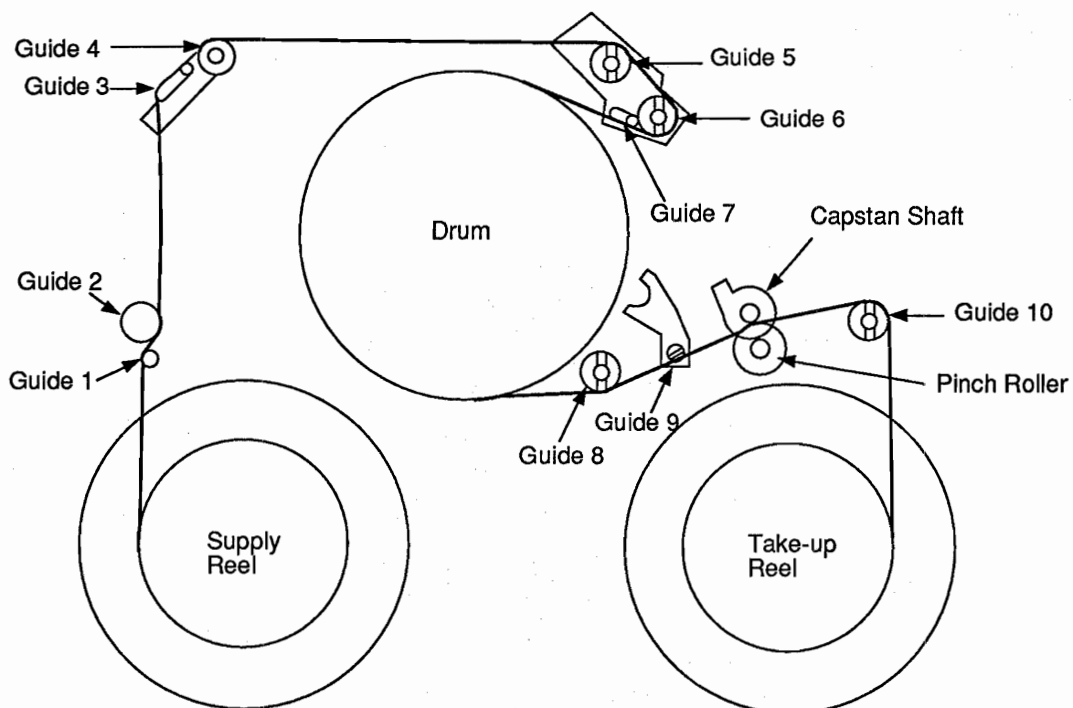


Fig. 1-2 Top View

Tape Running Position Alignment

When the RF waveform is not flat, follow the procedure below.

- 1) Adjust Guide 6 and 8 for the flattest waveform. (Fig. 1-3)

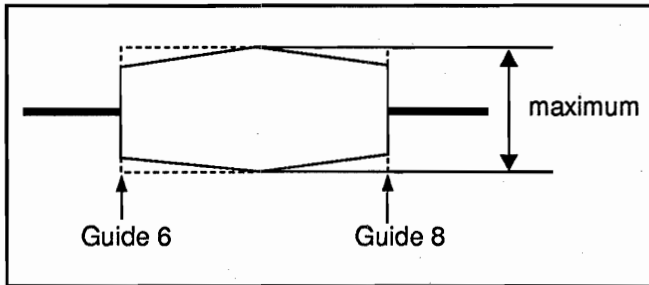


Fig. 1-3

- 2) Adjust VR525 (Automatic Track Finding Balance Volume) for the maximum amplitude of the waveform.
- 3) Visually check the tape path for curling. Adjust Guide 5 until curling smooths out.

Note: Guide 5 is slow to react. (Fig. 1-4)

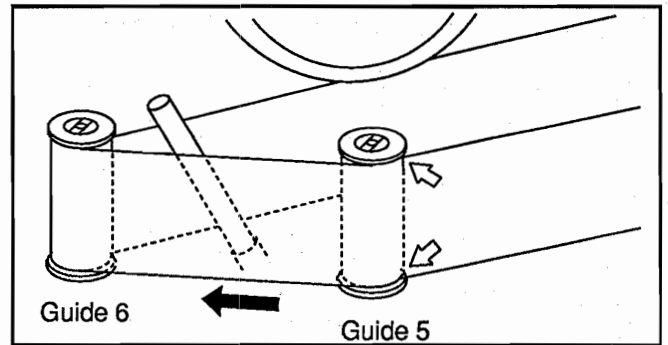


Fig. 1-4

- 4) Readjust VR525 to obtain the maximum waveform. (Fig. 1-5)

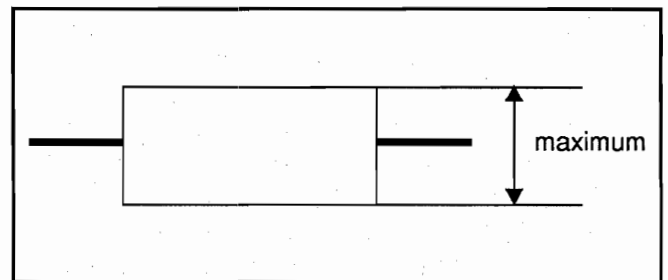


Fig. 1-5

Back Tension Adjustment

- 1) Set the unit in record mode.
- 2) Turn the BT Adjustment Screw (see below) to obtain a reading of $6.5 \pm 2g$ cm on the back tension meter cassette.

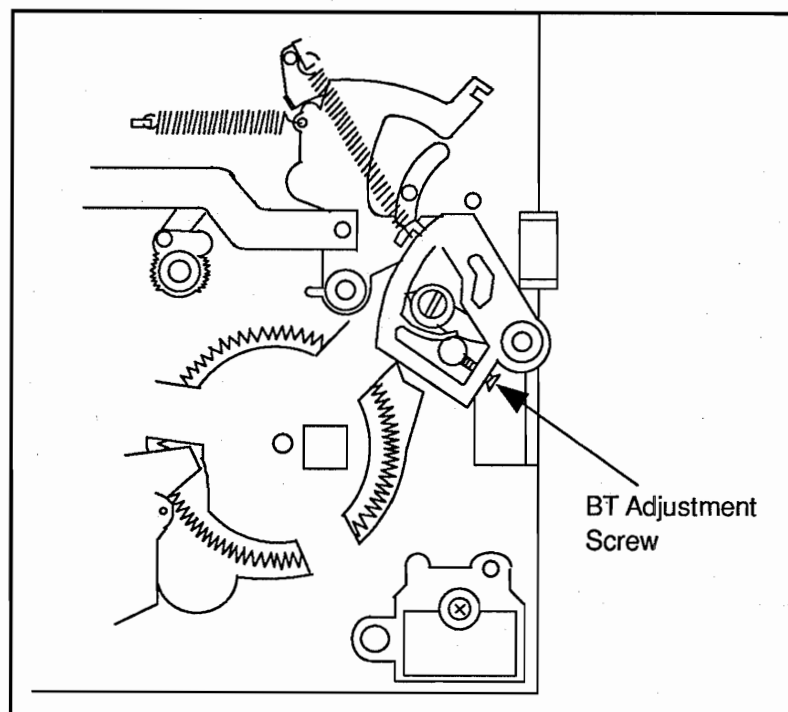


Fig. 1-6 Back Side of the Deck

Checking After Alignment

Tracking Check

- 1) Play back the alignment tape (FM-8N).
- 2) Turn VR525 until the amplitude of the RF waveform becomes 2/3 of the full level. (Fig. 1-7)

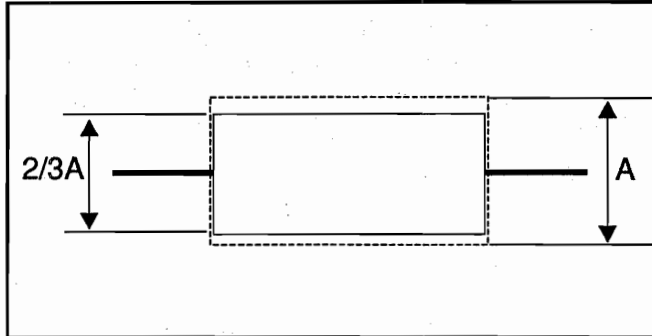


Fig. 1-7

- 3) Be sure that the minimum value (E MIN) of the RF waveform is equal to or more than 75% of the maximum value (E MAX). (Fig. 1-8)

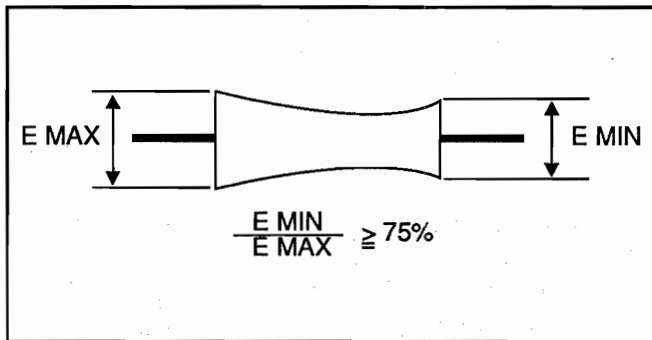


Fig. 1-8

- 4) Be sure that the fluctuation of the RF waveform is as shown in Fig. 1-9 at both ends.

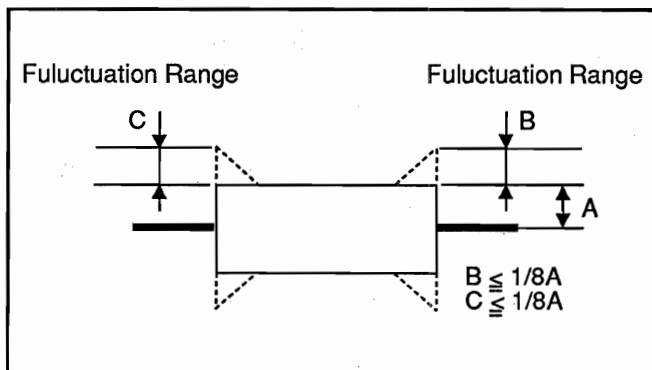


Fig. 1-9

- 5) Set the unit in review mode and be sure that the noise pitch of the RF waveform is even. (Fig. 1-10) If not, proceed to "Noise Pitch Adjustment."

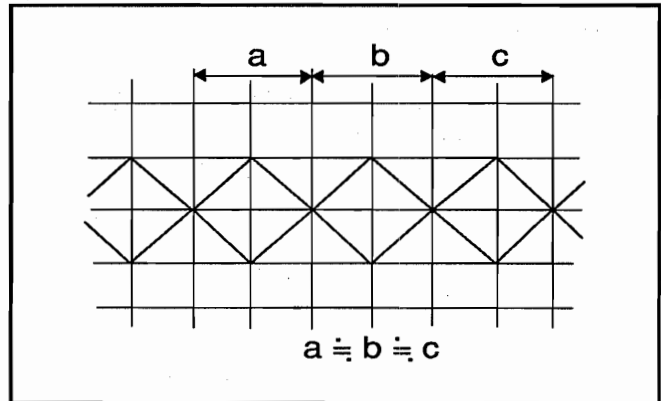


Fig. 1-10

- 6) If the tape is creased by the top flange of Guide 8 and/or the bottom flange of Guide 9 in review mode, turn Guide 10, 45 degrees at a time, to smooth the tape. (Fig. 1-11)

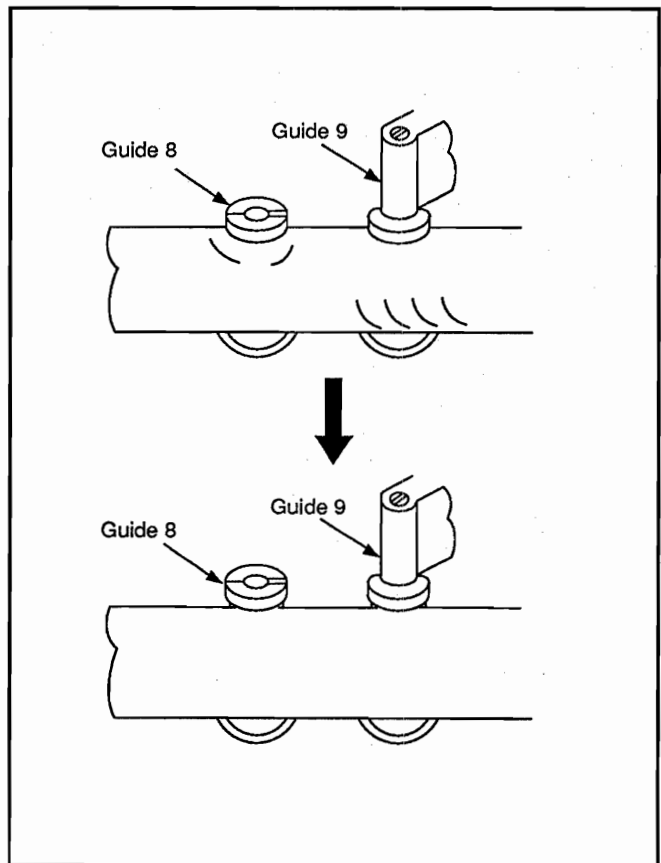


Fig. 1-11

- 7) After all adjustments have been completed, adjust the ATF Balance Volume (Refer to "Electrical Adjustment"). Readjust VR525 for the maximum RF waveform.

Noise Pitch Adjustment

After you have made sure that the RF waveform is flat in play mode, set the unit to review mode and check the noise pitch.

- 1) If the pitch is less at the left side (Fig. 1-12), adjust Guide 5 according to the procedure in "Tape Supply Alignment."

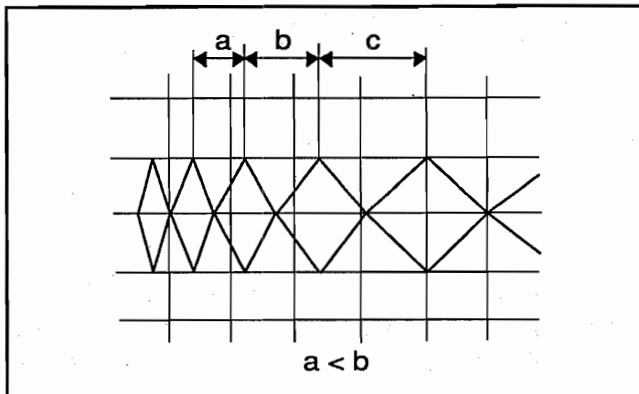


Fig. 1-12

- 2) If the pitch is less at the right side (Fig. 1-13), adjust Guide 9 according to the procedure in "Tape Take-Up Alignment." After the adjustment, be sure that the tape is not creased at the flange of either Guide 8 or Guide 9. If the tape is creased, turn Guide 10 to smooth the tape. For this adjustment, refer to Step 6 of "Checking After Adjustment."

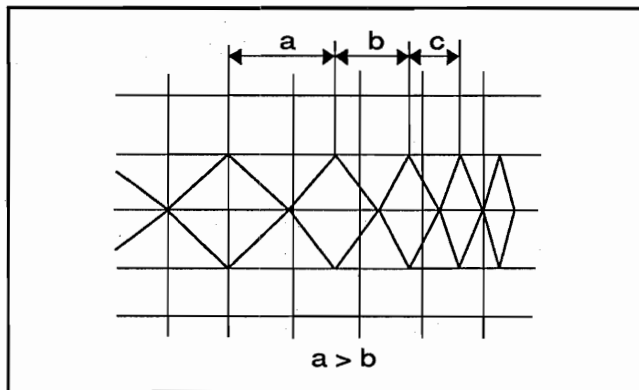


Fig. 1-13

Checking the Starting Waveform of Playback

Check to see if the RF waveform is flat at the beginning of the playback after loading, cueing, reviewing, and fast-forwarding. If not, follow the procedure below.

- 1) If a noise occurs on the right side of the RF waveform at the beginning of the playback after loading, turn Guide 9 counterclockwise about 30 degrees and check the flatness of the RF waveform again.

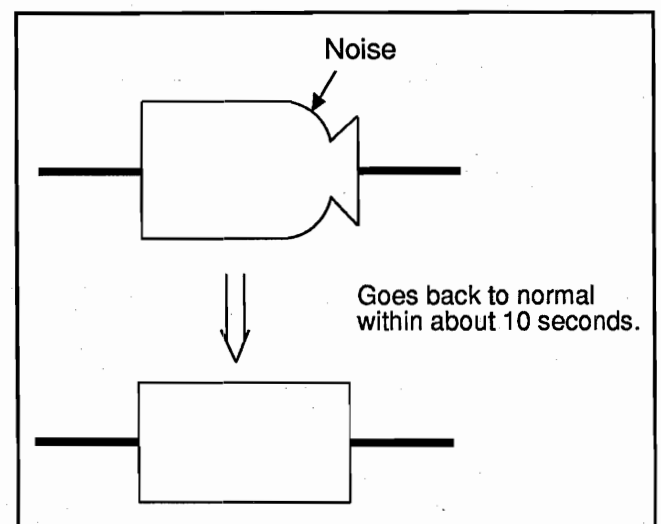


Fig. 1-14

- 2) If a noise occurs on the left side of the RF waveform at the beginning of the playback after loading, turn Guide 5 about 30 degrees at a time and adjust it while checking the flatness of the RF waveform.

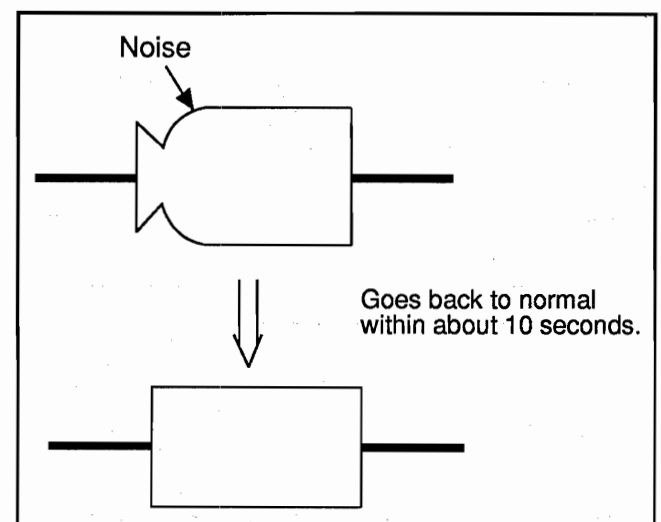
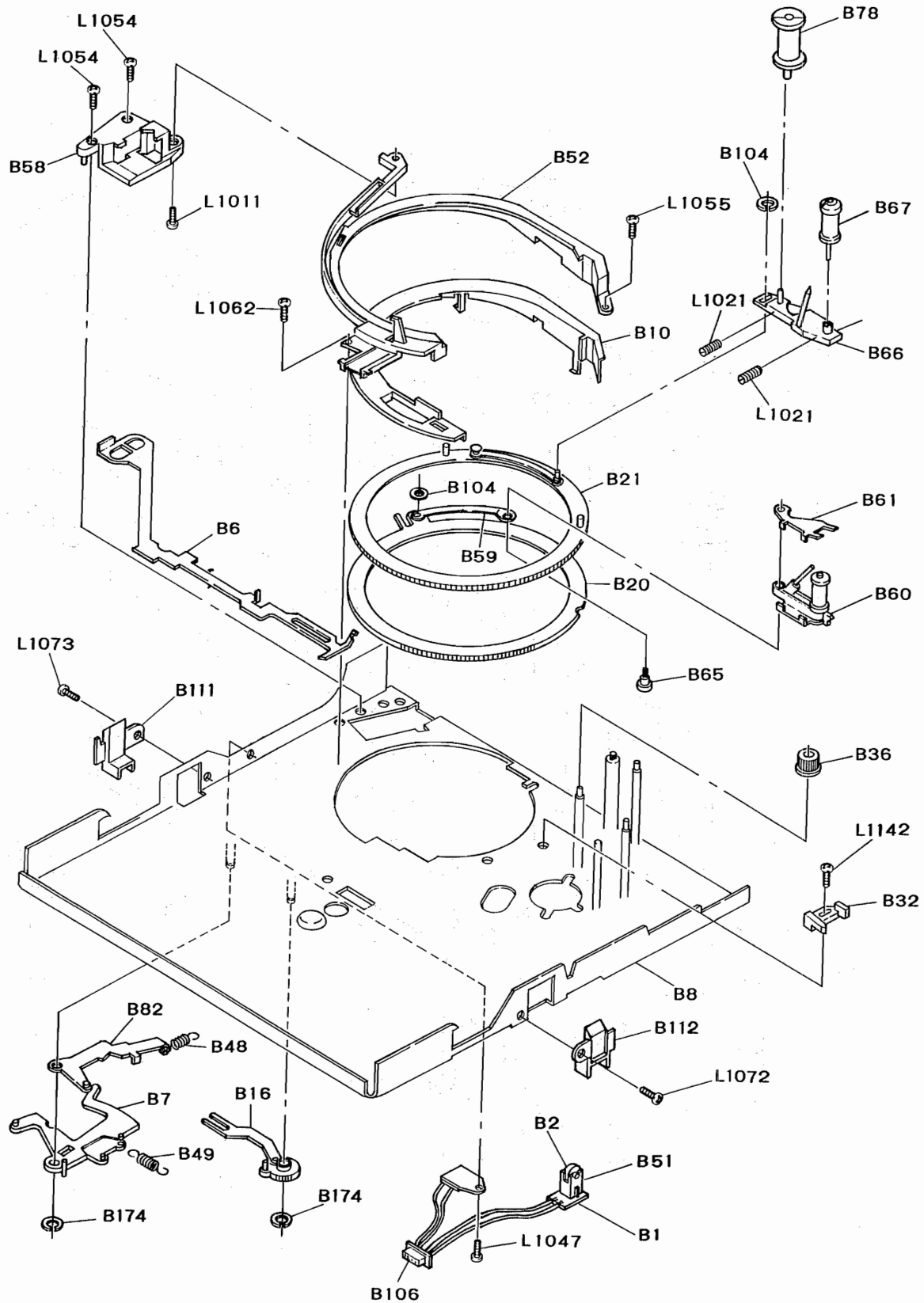


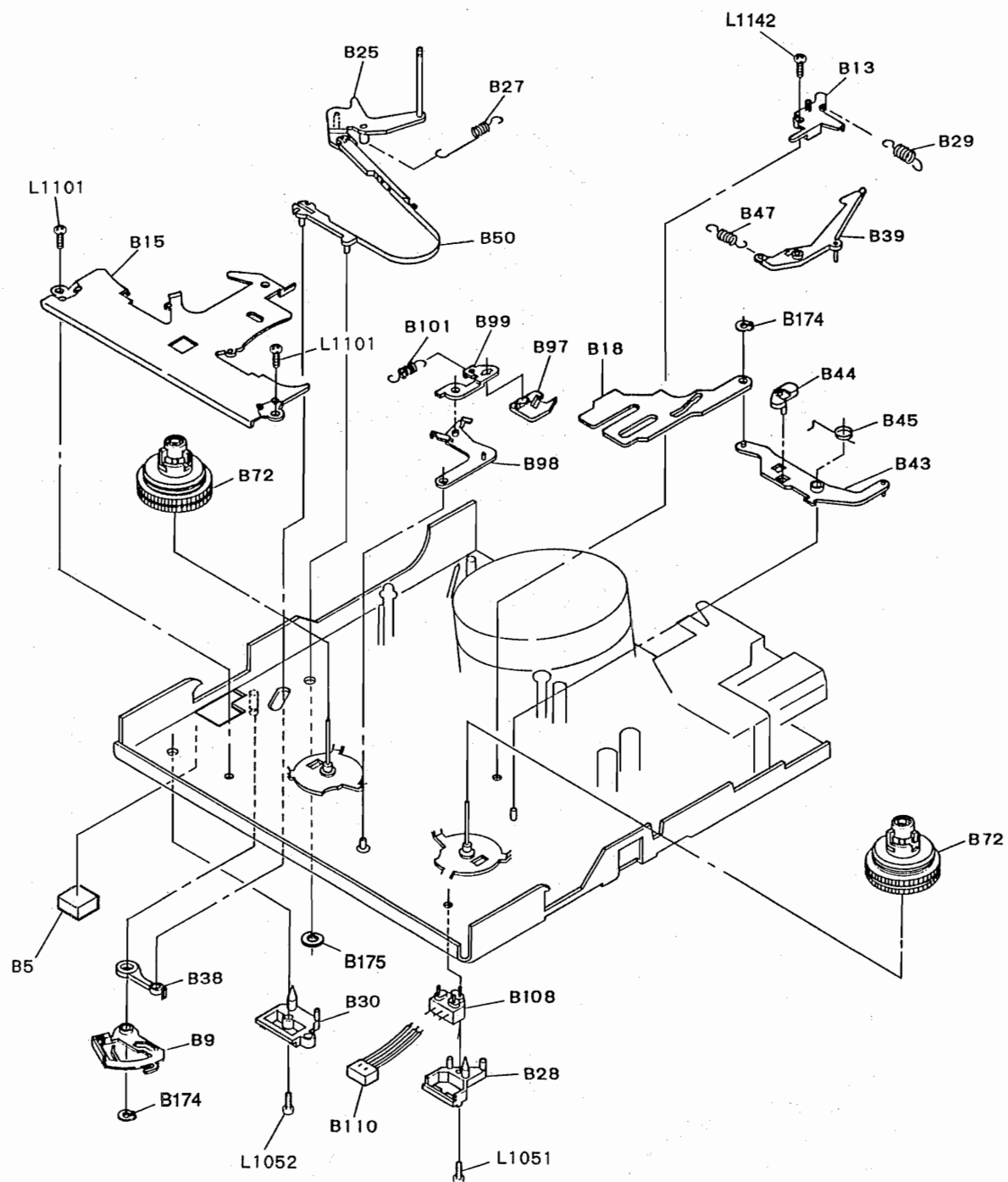
Fig. 1-15

DECK EXPLODED VIEWS

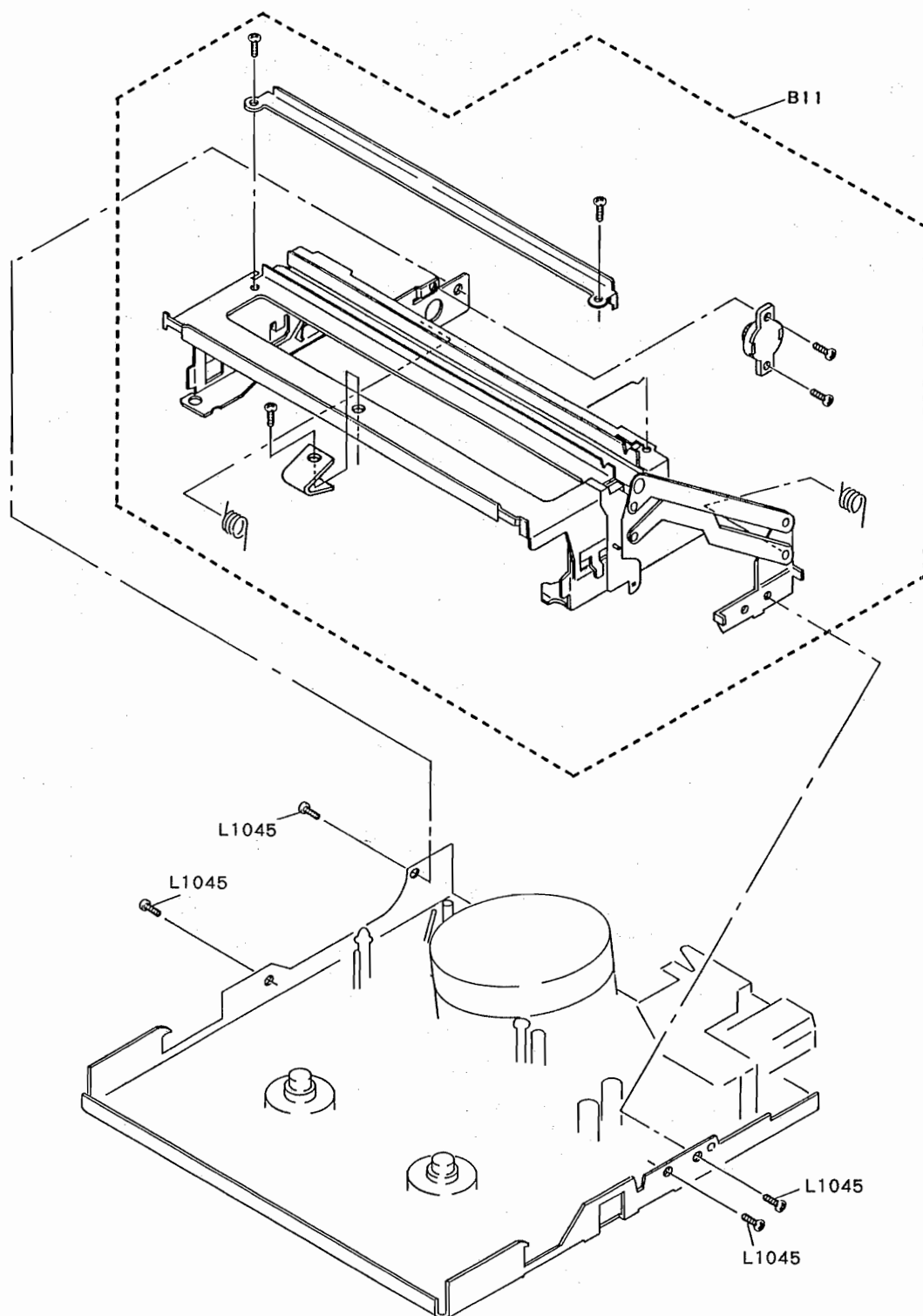
View 1



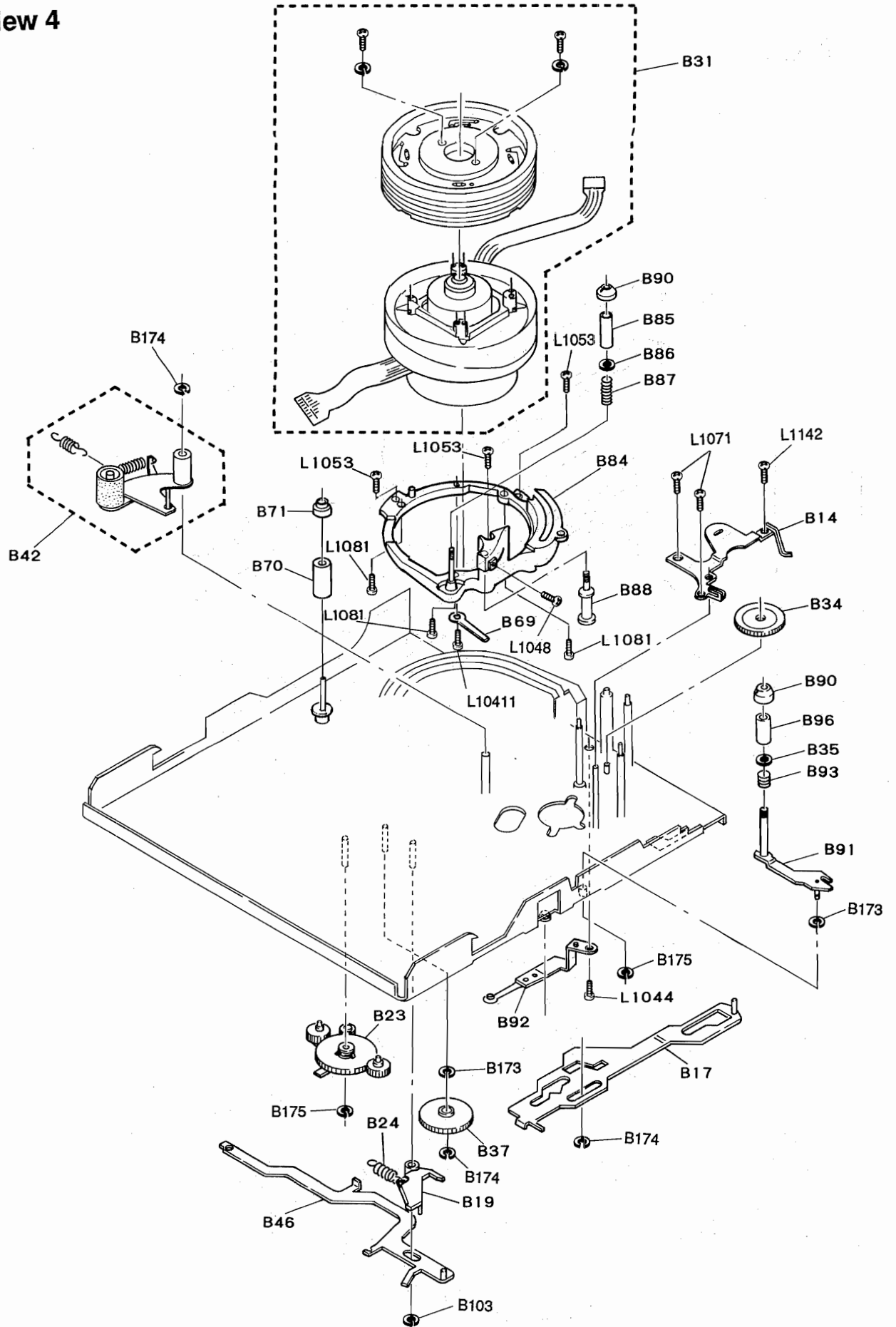
View 2



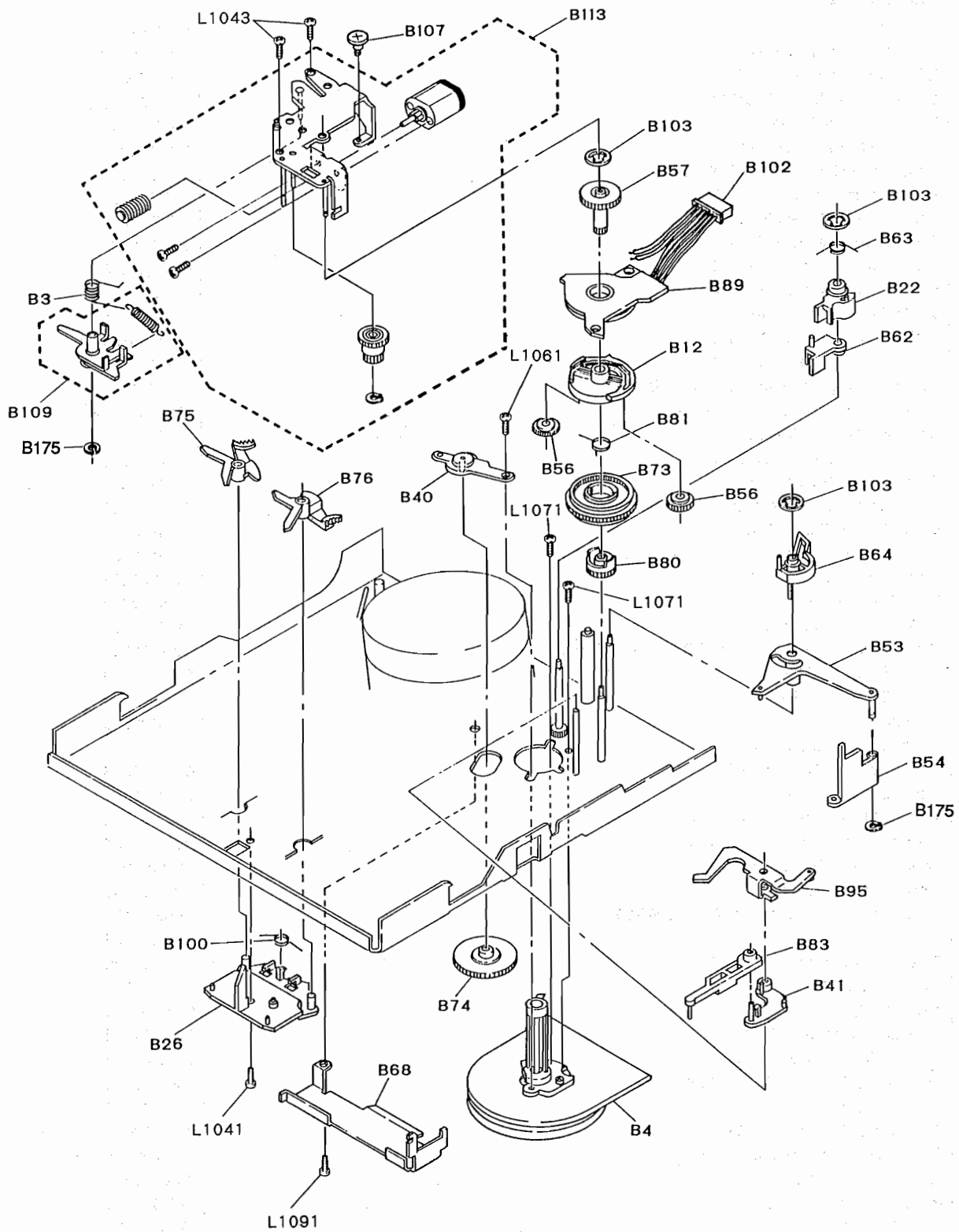
View 3



View 4



View 5



DECK MECHANICAL PARTS LIST

Ref. No.	Description	Part No.
	Deck Assembly	C1803UA
B 1	LED PCB	BC1800G01001
B 2	LED PLT462T3	EPLT462T3***
B 3	Spring MG1 Thrust 8MM LD-25	OVM401048
B 4	Motor 8MM CA-01	1640403
B 5	Spacer (B)	OVM404611
B 6	BT Set Slider 8MM BT-12	OVM200343
B 7	L BT Lock Lever 8MM BT-20	OVM300328
B 8	Chassis Assembly 8MM CH-01	OVM100089A
B 9	BT Adjust Lever BT-21N	OVM300715
B 10	Inner Guide Rail 8MM LD-02	OVM100092
B 11	Cassette Holder Assembly 8MM HL-01	OVM200328
B 12	Power Logic Cam 8MM PL-05	OVM200332
B 13	Spring Bracket 8MM SP-01	OVM300335
B 14	RG Guide Holder 8MM SP-12	OVM300393
B 15	Mechanism Cover 8MM SP-13	OVM200385
B 16	DL Gear Assembly 8MM DL-01	OVM400970
B 17	Joint Slide Assembly 8MM RJ-07	OVM300302
B 18	Brake Operation Slider 8MM RJ-14	OVM300304
B 19	Review Brake Lever 8MM DL-08	OVM400972
B 20	Lower Loading Ring Assembly 8MM LD-03	OVM300307
B 21	Upper Loading Ring Assembly 8MM LD-08	OVM300309A
B 22	Unloading Stopper 8MM LD-18	OVM300311
B 23	Swing Arm Assembly 8MM RD-14	OVM300319
B 24	Review Brake Spring 8MM DL-10	OVM400973
B 25	Back Tension Lever Assembly 8MM BT-01	OVM400983
B 26	Lever Bracket 8MM OB-06	OVM300331
B 27	Back Tension Spring (1) NTSC 8MM BT-10	OVM400992
B 28	R SW Holder 8MM SP-09	OVM300337
B 29	BT Release Spring 8MM BT-14	OVM400993
B 30	L SW Holder 8MM SP-11	OVM300364
B 31	Cylinder Drum Assembly (1) NTSC 1Speed Mithumi	OVM301561C
B 32	Guide Ring 8MM LD-14	OVM401038
B 34	Lower Gear 8MM LD-15	OVM401039
B 35	TG Flange 8MM CB-08	OVM400895
B 36	Upper Gear 8MM LD-16	OVM401040
B 37	Reduction Gear 8MM RD-27	OVM401085
B 38	Joint Holder 8MM BT-22	OVM401131
B 39	T Control Lever Assembly 8MM DL-11	OVM401152
B 40	Bracket Gear Assembly 8MM SP-05	OVM401166
B 41	Preset Lever 8MM OP-12	OVM400957
B 42	Pinch Lever Assembly 8MM OP-11	OVM400963
B 43	Reel Operation Lever Assembly 8MM RJ-10	OVM401179
B 44	T Sub Brake 8MM RJ-16	OVM401184
B 45	T Sub Brake Spring 8MM RJ-17	OVM401296
B 46	Slide Direction Assembly 8MM DL-13	OVM401361
B 47	T Control Spring (1) NTSC	OVM401363
B 48	Direction Spring 8MM DL-16	OVM401364
B 49	BT Lock Spring 8MM BT-24	OVM401365
B 50	Band Brake Assembly 8MM BT-06	OVM400988
B 51	LED Bracket 8MM SP-04	OVM401140
B 52	Outer Guide Rail 8MM LD-01	OVM100091
B 53	Logic Drive Lever Assembly 8MM RJ-01	OVM400996
B 54	Joint Lever 8MM RJ-05	OVM401001
B 56	Planetary Gear 8MM PL-04	OVM401019
B 57	Input Gear 8MM PL-06	OVM401021

Ref. No.	Description	Part No.
B 58	Catcher Guide 8MM LD-27	OVM200337
B 59	Lower Drive Ring 8MM LD-05	OVM401031
B 60	Moving Guide 2 Assembly 8MM MG-12	OVM401052
B 61	Slide Bracket N	OVM402874
B 62	Loading Stopper 8MM LD-17	OVM401041
B 63	Stopper Spring 8MM LD-19	OVM401042
B 64	Guide Set Lever 8MM LD-22	OVM401045
B 65	MG2 Order Screw 8MM MG-17	OVM401055
B 66	MG1 Slide Assembly 8MM MG-02 or MG1 Slide Assembly 8MM MG-02	OVM300312 OVM301647
B 67	Guide Roller MG1	OVM300417
B 68	PCB Bracket 8MM SP-15	OVM300412
B 69	Earth Lug 8MM PAL R/P	OVM402102
B 70	Impedance Roller 8MM TG-04	OVM401059
B 71	Impedance Roller Flange 8MM TG-05	OVM401060
B 72	Reel Base Assembly 8MM RD-01	OVM401061
B 73	LD Drive Gear 8MM PL-01	OVM300305
B 74	Primary Gear 8MM RD-28	OVM401086
B 75	S Brake 8MM OB-01	OVM401091
B 76	T Brake 8MM OB-02	OVM401092
B 78	Guide Roller MG1 (2) MG-11C	OVM300657
B 80	Output Gear 8MM PL-02	OVM401017
B 81	MG2 Spring 8MM PL-03	OVM401301
B 82	BT Lock Assembly BT-23N	OVM402328
B 83	Guide Operation Link Assembly 8MM OP-07	OVM401139A
B 84	Cylinder Base Assembly 8MM CB-01 or Cylinder Base Assembly 8MM CB-01	OVM300292A OVM301646
B 85	Tape Guide T1 8MM CB-07	OVM400894
B 86	TG Flange 8MM CB-08	OVM400895
B 87	TG Spring 8MM CB-09	OVM400896
B 88	Tape Guide T2 Assembly 8MM CB-10	OVM400897
B 89	Mode Switch N	SSR0103HD001
B 90	Flange Nut 8MM CB-06	OVM400978
B 91	RG Lever Assembly 8MM RG-07	OVM400979A
B 92	Earth Brush Assembly (L)	OVM404230
B 93	RG Spring 8MM RG-11	OVM400982
B 95	Pinch Operation Lever Assembly 8MM OP-21	OVM401299
B 96	Tape Guide T2 8MM CB-13	OVM401116
B 97	LD Brake 8MM OB-03	OVM401158
B 98	Brake Operation Lever Assembly 8MM OB-08	OVM401185
B 99	LD Brake Joint Lever 8MM OB-11	OVM401187
B 100	Main Brake Spring 8MM OB-07	OVM401366
B 101	LD Brake Spring 8MM OB-12	OVM401367
B 102	Connector Assembly 6P	WX1C1580-003
B 103	Fixer Washer 8MM SP-24	OVM401734
B 104	Cut Washer 0.8 8MM	OVM401745
B 106	Dew Sensor H	PCZHUMZHH004
B 107	Mode SW Screw 8MM PL24	OVM401323
B 108	Switch SW-101	5622203
B 109	MG1 Lever Assembly 8MM LD-26	OVM401049
B 110	Plug 8MM SP-21	WX1C1580-004
B 111	Holder; C1580EA	OVM300855
B 112	Holder; C1580EA	OVM300856
B 113	Power Logic Assembly	OVM300659
B 173	Polyslider Washer: 2.1A	OVM404257
B 174	Cut Washer, 1.6 VD8442	6P50178

Ref. No.	Description	Part No.
B 175	Cut Washer, 1.2 VD8216	6P50178
L 1011	Accurate Screw B-tight M1.6X6	MPMGG060
L 1021	Accurate Screw M1.2X3	MPNEC030
L 1041	Screw M1.6X2.5	MPKJG025
L 1043	Screw M1.6X2.5	MPKJG025
L 1044	Screw M1.6X2.5	MPKJG025
L 1045	Screw M1.6X2.5	MPKJG025
L 1047	Screw M1.6X2.5	MPKJG025
L 1048	Screw M1.6X2.5	MPKJG025
L 1051	Accurate Screw 3PCS Combi M1.6X4.5	MPKJG045
L 1052	Accurate Screw 3PCS Combi M1.6X4.5	MPKJG045
L 1053	Accurate Screw 3PCS Combi M1.6X4	MPKJG040
L 1054	Accurate Screw 3PCS Combi M1.6X4	MPKJG040
L 1055	Accurate Screw 3PCS Combi M1.6X4	MPKJG040
L 1061	Screw M1.6X3	MPNEG030
L 1062	Screw M1.6X3	MPNEG030
L 1071	Accurate Screw 3PCS Combi M1.6X2	MPMJG020
L 1072	Accurate Screw 3PCS Combi M1.6X2	MPMJG020
L 1073	Accurate Screw 3PCS Combi M1.6X2	MPMJG020
L 1081	Accurate Screw 3PCS Combi M1.6X5	MPKJG050
L 1091	Screw M1.6X1.8	MPNEG018
L 1101	Accurate Screw S-tight M1.6X3	MPMFG030
L 1142	Accurate Screw 3PCS Combi M1.6X2.5	MPKJG025
L10411	Screw M1.6X2.5	MPKJG025

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